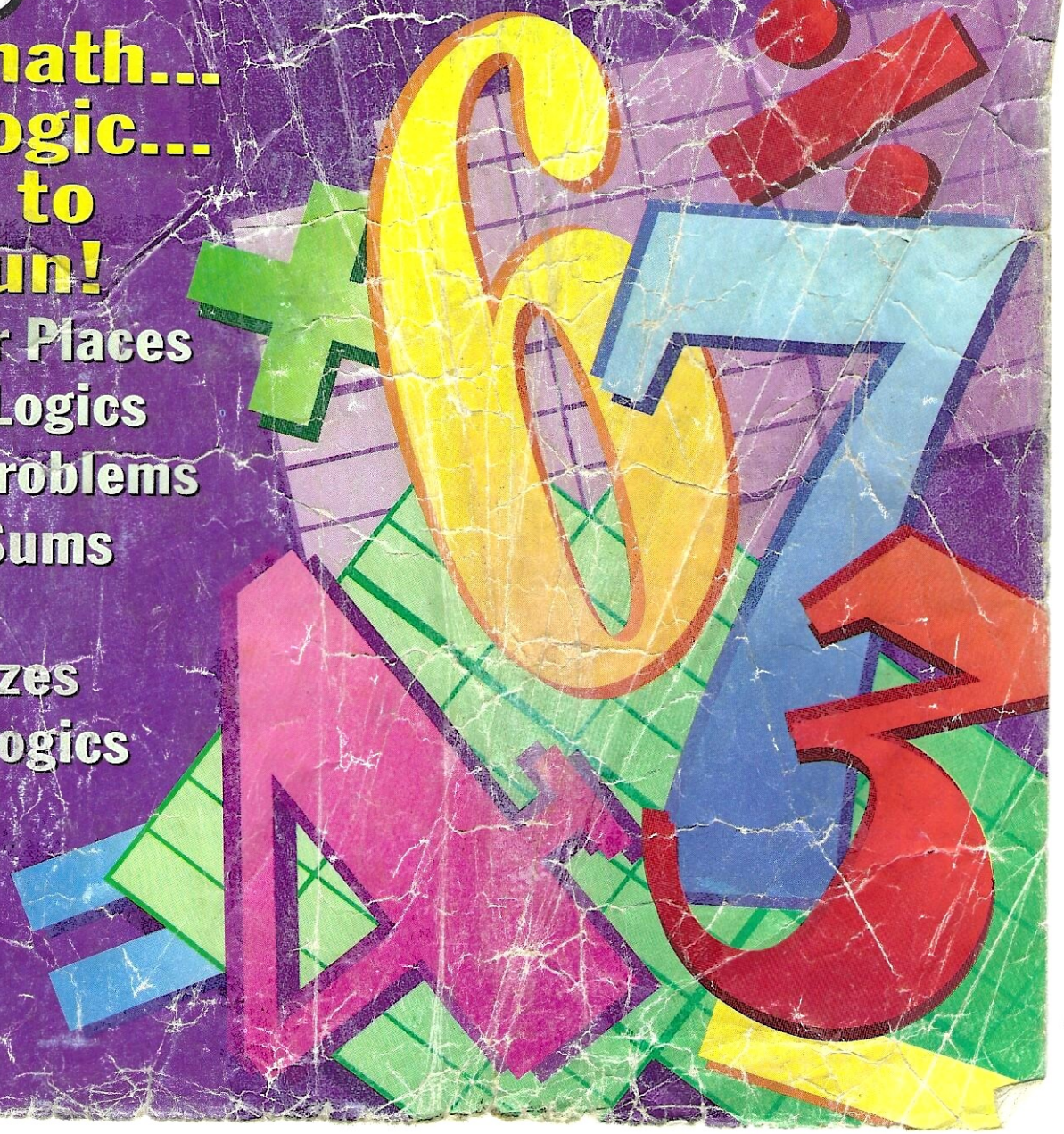
Dell

NOW 32 MORE PAGES OF FUN!

MARCH 20

Math Puzzles AND Logic Problems



More math... more logic... add up to more fun!

- 18 Number Places
- 15 Figure Logics
- 20 Logic Problems
- 30 Cross Sums
- 2 Trigons
- 2 Math Mazes
- 2 Square Logics

and more!

$4.99 U.S./$6.99 CAN.

03

0 75470 08289

6 ISSUES, JUST $10!

Subscribe today and get 6 months of award-winning mystery stories delivered direct to your door!

Alfred Hitchcock's Mystery Magazine is packed with ***NEW*** short stories from suspense to classic whodunits. In each issue you'll get book reviews, a logic puzzle and a Mysterious Photograph Contest.

Ellery Queen's Mystery Magazine delivers suspenseful stories from the honor roll of mystery and crime fiction's great writers. Enjoy mystery limericks, book reviews, and an occasional mystery crossword.

Order toll-free or mail the coupon today!

Alfred Hitchcock's Mystery Magazine
6 Issues, just $10.00

Mail to: Alfred Hitchcock, P.O. Box 54011, Boulder, CO 80322
or call toll-free ***1-800-333-3311***

☑ **YES!** Enter my subscription to Alfred Hitchcock's Mystery Magazine. I get 6 issues for only $10. 5E91

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Method of Payment:

Enclosed is my check or money order for $ _____

❑ Bill me (US only) Charge my: ❑ VISA ❑ MasterCard

Card number _____ Exp _____

Cardholder's signature _____

This special offer is limited to first time subscribers. Please allow 6 to 8 weeks for delivery of first issue. We publish a double issue in July/Aug. which counts as 2 issues towards your subscription. For delivery outside the U.S.A., add $5 per subscription (U.S. funds). Offer expires 12/31/02.

Ellery Queen's Mystery Magazine
6 Issues, just $10.00

Mail to: Ellery Queen, P.O. Box 54052, Boulder, CO 80322
or call toll-free ***1-800-333-3053***

☑ **YES!** Enter my subscription to Ellery Queen's Mystery Magazine. I get 6 issues for only $10. 5E91

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Method of Payment:

Enclosed is my check or money order for $ _____

❑ Bill me (US only) Charge my: ❑ VISA ❑ MasterCard

Card number _____ Exp _____

Cardholder's signature _____

This special offer is limited to first time subscribers. Please allow 6 to 8 weeks for delivery of first issue. We publish a double issue in Sept./Oct. which counts as 2 issues towards your subscription. For delivery outside the U.S.A., add $5 per subscription (U.S. funds). Offer expires 12/31/02.

Dell

March 2002

Math Puzzles AND Logic Problems

Editor-in-Chief: **Abby Meher Taylor**
Senior Executive Editor: **Mark Lagasse**
Executive Editor: **Patrick Maropis**
Senior Editor: **Daniel Stevens**
Associate Editors: **Elaine V. Stein, Chris DiNapoli**
Editorial Coordinator: **Alison Hoogerwerf**
Assistant Editors: **Judy Downer, Laura E. Vickery, Maria Valiente, Jennifer Pascoe**
Production Editors: **Melissa J. Caraway, Mark F. Russell, David Pfaltzgraff-Carlson**
Word Search Editors: **Glenn Covert, Julie E. Christie**
Production Manager: **Angela Ferguson**
Typesetting/Production Associates: **Georgiana Solomon, Howard John Arey**
Production Assistant: **Jonathan A. Leffel**
Editorial Assistant: **Arien Hoogerwerf**
Administrative Assistant: **Aldona D. Dowbysz**
Senior Art Director: **Victoria Green**
Art Director: **O'Neil Nanco**
Assistant Art Director: **Maryann Mccuen**
Research Associate: **Lenore Mendelson**

DELL MAGAZINES
Managing Editor: **Carla Lee Lewis**
Executive Director, Art and Production: **Susan Kendrioski**
Vice President, Sales and Marketing: **Bruce W. Sherbow**
Manager, Subsidiary Rights and Marketing: **Abigail Browning**
Circulation Services: **Sandy Marlowe**
Advertising Representative: **Dresner Direct, Inc., New York, N.Y. 10016**

CONTRIBUTORS

Mike Akers • Diane Baldwin • Gerald Berkowitz • Mary Marks Cezus David Champlin • Lydian Davis • Kevyn Dymond • Margaret Edmiston • Jean Hannagan • Lester Jordan • Henry Kroger • Robert Johnson • Richard Latta • Alan Lefcourt • Walter Mackey • Walter Mackey • Ronald Pearce • W.R. Pinkston • Mary Powell • Todd Rew Evelyn Rosenthal • Georgena Sil • Julie Spence • Linda Thistle Nancy and Thomas Westbom • Randall Whipkey • Patricia Stevens Wrincik • Diane Yoko • Susan Zivich

Calendar of on-sale dates is on page 92.

DELL MATH PUZZLES AND LOGIC PROBLEMS, No. 57, (ISSN 1070-4078). March 2002. Published 6 times per year (Jan., Mar., May, July, Sept., Nov.) Copyright © 2002 by Dell Magazines, a division of Crosstown Publications, 6 Prowitt St., Norwalk, CT 06855. All rights reserved. No part of this magazine may be reproduced without the prior written permission of the publisher. **DELL MATH PUZZLES AND LOGIC PROBLEMS** published by Dell Magazines, a division of Crosstown Publications. Subscriptions in the U.S.A. and Possessions, $29.94 per year; in all other countries, $34.94 per year. Periodical postage paid at Norwalk, CT and additional mailing offices. For SUBSCRIPTIONS, RENEWALS, CHANGES OF ADDRESS (include old address label), write to DELL MATH PUZZLES AND LOGIC PROBLEMS, P.O. Box 54185, Boulder, CO 80322-4185. Please allow up to 8 weeks for shipment. **POSTMASTER:** Send change of address to DELL MATH PUZZLES AND LOGIC PROBLEMS, PO. Box 54625, Boulder, CO 80328-4625. We are not responsible for the loss of unsolicited material. The advertisements appearing in this publication are, to the best of our knowledge, correct representations of the products or services offered, but no endorsement by **DELL MATH PUZZLES AND LOGIC PROBLEMS** is intended or implied. Any complaints against an advertiser should be addressed to the Advertising Sales Department, which will seek a satisfactory resolution.

Cover illustration by O'Neil Nanco

Printed in Canada.

CONTENTS

PRINTED WITH SOY INK

▶ STANDARD FEATURES

Bingo Plays 1 – 3 ..... 10, 22, 30
Crossmath 82
Cross Sums 1 – 28 ..... 8, 9, 18, 19, 28 29, 38, 39, 48, 49 58, 59, 68, 69
Cross Sums 29 & 30 (jumbo) 78, 79
Figure Logic 1 (beginner) 5
Figure Logic 8 (jumbo) 50
Figure Logic 2 – 7, 9 & 10, 12 & 13 ..... 14, 23, 32 40, 60, 80
Figure Logic 11 (variety) 70
Figure Logic 14 & 15 (challenger) 83, 85
Kross Number Kriss Krosses 1 & 2 11
Logic Problems 1 – 20 ..... 6, 13, 16, 17, 24 31, 34, 36, 43, 47 52, 56, 57, 62, 64, 67, 73, 75, 84, 86
Math Mazes 1 & 2 53
Number Place 1 – 18 ..... 20, 33
Number Place Challenger 81
Square Logics 1 & 2 ..... 42, 63
Trigons 1 & 2 ..... 72, 77
Word Arithmetic 1 – 54 ..... 15, 25, 35, 45, 55, 65

▶ MATH & LOGIC POSERS

Add-It 1 & 2 46
Addition Logic 71
Black Magic 1 & 2 41
By the Numbers 41
Count the Triangles 7
Cryptic Math 54
Five By Five 27
Go Figure! 44
Griddigits 1 & 2 12
Half Time 12
Jigsaw Logic 66
Letter Place 1 – 3 40
Lost Sums 41
Mathematical Deduction 54
Numberama 46
Number Fill-In 7
On the Surface 1 & 2 26
Out and Around 61
Secret Squares 66
Sentence Arithmetic 76
Sum 'Em Up 74
Sum Logic 1 & 2 44
Sum Spots 74
Three-Layer Magic 27
Triangular Square 23
Two-Part Math 71
What's the Order? 50

▶ LETTER FROM THE EDITORS 4

LETTER FROM THE EDITORS

It's March, which means it's time to begin work on the yearbook for Dell Puzzle High's Class of 2002. We like to think all of our varied features are equally meritorious, but what yearbook would be complete without a few predictions and parting opinions?

So what do the years ahead hold for these posers large and small? Which lucky favorite will be voted "Most Valuable Puzzle"? Which unfortunate dozer will be voted "Most Likely To Induce Sleep"? It's all up to you, solvers. Write your votes in the blanks below, grab your scissors and clip out your entry, then mail, fax, or e-mail in your say. Don't forget to rate the goodies new to *Dell Math Puzzles and Logic Problems*, like Beginner Figure Logic and Sum 'Em Up. Which will be "Most Likely to Succeed"? Which the "Least..."? Look for the results and your comments in the July Letter from the Editors. Send your entry to the address below:

Most Popular	*Least Popular*	*Most Overrated*	*Most Underrated*	*Most Solver-friendly*
Most Cruel and Unusual	*Sentimental Favorite*	*Most Likely To Wear Out Your Eraser*	*Most Reminiscent Of Homework*	*Most Likely To Induce Sleep*
Guiltiest Pleasure	*Most Addictive*	*☆ MVP ☆ Most Valuable Puzzle!*	*New Puzzle Most Likely To Succeed*	*New Puzzle Least Likely To Succeed*

Dell Math Puzzles and Logic Problems
Dell Puzzle Magazines
475 Park Avenue South
New York, NY 10016
Fax (212) 686-7414
e-mail: puzzles@dellmagazines.com

the Editors

The May issue of *Best of Dell Math Puzzles and Logic Problems* goes on sale March 12.
Thank you for selecting Dell.

LETTER FROM THE EDITORS

It's March, which means it's time to begin work on the yearbook for Dell Puzzle High's Class of 2002. We like to think all of our varied features are equally meritorious, but what yearbook would be complete without a few predictions and parting opinions?

So what do the years ahead hold for these posers large and small? Which lucky favorite will be voted "Most Valuable Puzzle"? Which unfortunate dozer will be voted "Most Likely To Induce Sleep"? It's all up to you, solvers. Write your votes in the blanks below, grab your scissors and clip out your entry, then mail, fax, or e-mail in your say. Don't forget to rate the goodies new to *Dell Math Puzzles and Logic Problems*, like Beginner Figure Logic and Sum 'Em Up. Which will be "Most Likely to Succeed"? Which the "Least..."? Look for the results and your comments in the July Letter from the Editors. Send your entry to the address below:

Most Popular	*Least Popular*	*Most Overrated*	*Most Underrated*	*Most Solver-friendly*
Most Cruel and Unusual	*Sentimental Favorite*	*Most Likely To Wear Out Your Eraser*	*Most Reminiscent Of Homework*	*Most Likely To Induce Sleep*
Guiltiest Pleasure	*Most Addictive*	*☆ MVP ☆ Most Valuable Puzzle!*	*New Puzzle Most Likely To Succeed*	*New Puzzle Least Likely To Succeed*

Dell Math Puzzles and Logic Problems
Dell Puzzle Magazines
475 Park Avenue South
New York, NY 10016
Fax (212) 686-7414
e-mail: puzzles@dellmagazines.com

the Editors

The May issue of *Best of Dell Math Puzzles and Logic Problems* goes on sale March 12.
Thank you for selecting Dell.

SOLVERS: If you are having problems finding any Dell Magazines at your favorite retailer, we want to help. First, let the store manager know that you want the store to carry your favorite titles. Then, send us a letter or post-card telling us the names of the magazines you cannot find, along with the full name and address of the store (with street name and number, if possible). Write to us at: Dell Magazines, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220, or send your e-mail to Newsstandmail@dellmagazines.com. Thank you!

FIGURE LOGIC 1

by Linda Thistle

BEGINNER

Solve Figure Logic by completing some simple arithmetic problems, which will enable you to move from clue to clue through the puzzle. You may discover that, at times, you will not be able to complete an entire number at first, but you may be able, by logic, to determine what one or more of the digits must be. If you enter those digits into the diagram, they may help you to solve other clues, and you can eventually return to the unfinished numbers and finally complete them.

NOTE: A square of a number is that number multiplied by itself. For example, the square of 6 is 36 (6 x 6 = 36). A square root is a number whose square is the given number (6 is the square root of 36). A product is the number resulting from the multiplication of two or more numbers (24 is the product of 6 x 4). A multiple is a number that is the product of a specific number and another number (30 and 24 are both multiples of 6, since 6 x 5 = 30 and 6 x 4 is 24). A palindrome is a number that reads the same forwards and backwards. A factor is a number that divides evenly into another number (4 is a factor of 12).

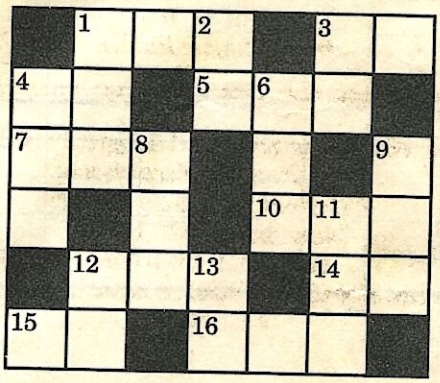
A starting help for this puzzle is on page 98.

ACROSS

1. Two hundred more than 9-Down
3. Three more than 14-Across
4. Consecutive odd digits in ascending order
5. 16-Across plus 1-Down
7. Consecutive digits rearranged
10. 7-Across plus 6-Down
12. One digit is the sum of the other digits
14. One-third of 13-Down
15. 3-Across plus 2-Down
16. One-third of 4-Down

DOWN

1. Consecutive digits rearranged
2. Forty more than 12-Down
3. Consecutive digits in ascending order
4. Ten more than 1-Across
6. Three hundred more than 8-Down
8. One more than 4-Down
9. 15-Across plus 3-Down
11. Sum of the digits is 14-Across
12. One less than 4-Across
13. 2-Down minus 3-Down



Solution is on page 89

*Crazy about **Figure Logic**? See page 21 to order the Collector's Series Edition!*

LOGIC PROBLEM 1

THE ARTISTS FORMERLY KNOWN AS...

by Evelyn B. Rosenthal

Chris, Holly, and three other archaeologists recently returned from an extensive, two-year-long excavation deep in South America. Having been out of the reaches of civilization for a while, each was eager to pick up his or her favorite band's latest album. At the record store, however, the friends discovered that each of their favorite bands, including Scream Machine, had changed its name during their absence! All the bands' new names start with "Sha..." (one group is now known as Shaggy Dogs), so Wong and friends ended up digging through the "S" section. From this information and the clues below, can you determine each archaeologist's full name, as well as the old and new names of his or her favorite group?

1. Ms. Turner's favorite band isn't the one now known as The Shanteuses.
2. Pat's favorite band isn't the one formerly known as the Handsome Phantoms, the one formerly known as Fluff 'n' Stuff, or the one formerly known as the Winnebago Schmoes.
3. The Handsome Phantoms fan (whose last name isn't Rivera) and Mr. Radcliffe only bought cassette tapes. George and Ms. Ross, who isn't Julia, only bought compact discs.
4. The fan of the band now known as Shady Boys is a man.
5. Rivera, whose favorite band isn't the one formerly known as Fluff 'n' Stuff, doesn't like The Shamrockers or The Shanteuses.
6. Julia's favorite band used to be known as Petals of Metal.
7. The Handsome Phantoms fan doesn't count The Shanteuses as one of his favorite groups.
8. The Winnebago Schmoes didn't change its name to Shady Boys or Shallow Hearts.
9. Fluff 'n' Stuff's new name is neither The Shanteuses nor The Shamrockers.

Solution is on page 93.

If you care to use the chart below in solving this Problem, you do so by entering all information obtained from the clues using, perhaps, an X to indicate a definite "no" and a dot to show a definite "yes." Remember: Once you enter a definite "yes" (dot), place a "no" (X) in all the rest of the boxes in each row and column that contains the dot.

	Rad.	Riv.	Ross	Turn.	Wong	Fluff	Petals	Phant.	Scream	Winne.	Shady	Shaggy	Shall.	Sham.	Shant.
Chris															
George															
Holly															
Julia															
Pat															
Shady Boys															
Shaggy Dogs															
Shallow Hts.															
Shamrockers															
Shanteuses															
Fluff 'n' Stuff															
Petals of Metal															
Phantoms															
Scream Mach.															
Winnebago															

If you wish to learn more about the use of Logic Problem charts and how they can assist you, send for a free leaflet of easy-to-follow instructions, "Solving Logic Problems, Step by Step." Mail to Dell Math Puzzles and Logic Problems, Dept. L.P., Dell Magazines Direct, 6 Prowitt St., Norwalk, CT 06855-1220. Please enclose a stamped, self-addressed envelope (long-letter size, if possible, please).

NUMBER FILL-IN

In this puzzle, the numbers to be entered into each row across and each column down will form a numerical sequence with the numbers already in the diagram. For example, if you saw the numbers 5, ?, 15 already in the puzzle, you could figure out that the missing number is 10, and the sequence involves adding 5 to each number to get the next number. The sequences always increase from LEFT to RIGHT and from TOP to BOTTOM. See if you can figure out each sequence and fill in all the missing numbers.

Solution is on page 88.

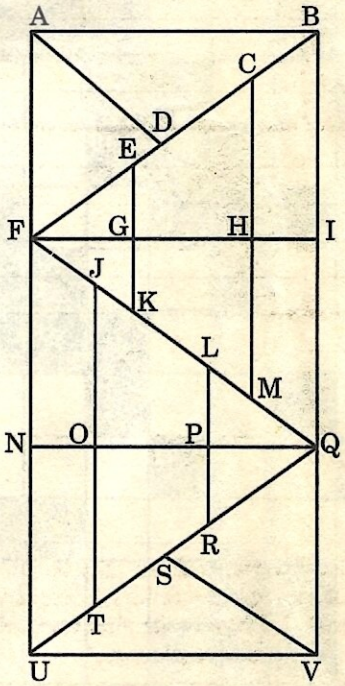
4	7	10	13	16		27	31	35	39	43	47	51	55	59
9		15				30			48			52		70
14		20		21	27	33	39	45	57			53		81
19	22	25	28	31			49		57		35	54	73	92
				41	47	53	59		63		55		83	
27	33	39	45	51			69				75		93	
30		43					79	83	87	91	95	99	103	107
33		47	53	59	75	?		90						117
36		51			77			97	102	107	112	117	122	127
39	47	55	63	71	79	87						123		
	49		69			97			124			129		151
48	51		75		100	107	114	121	128	135		135		155
52			81		105		120		132			141		159
56			87		110		126		136			147		163
60	71	82	93	104	115		132	136	140		146	153	160	167

the hints when it happens -

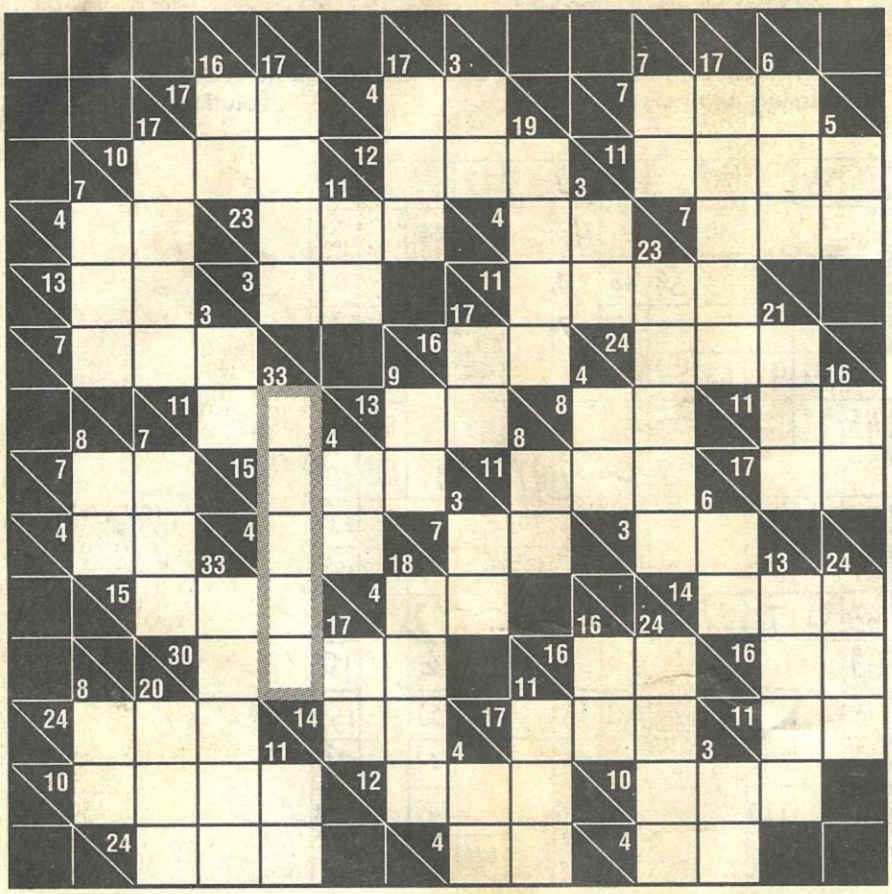
COUNT THE TRIANGLES

To solve this puzzle, write down the three letters that describe each triangle in the diagram below. We found 24 triangles in all; how many can you find?

Answer is on page 97.



CROSS SUMS

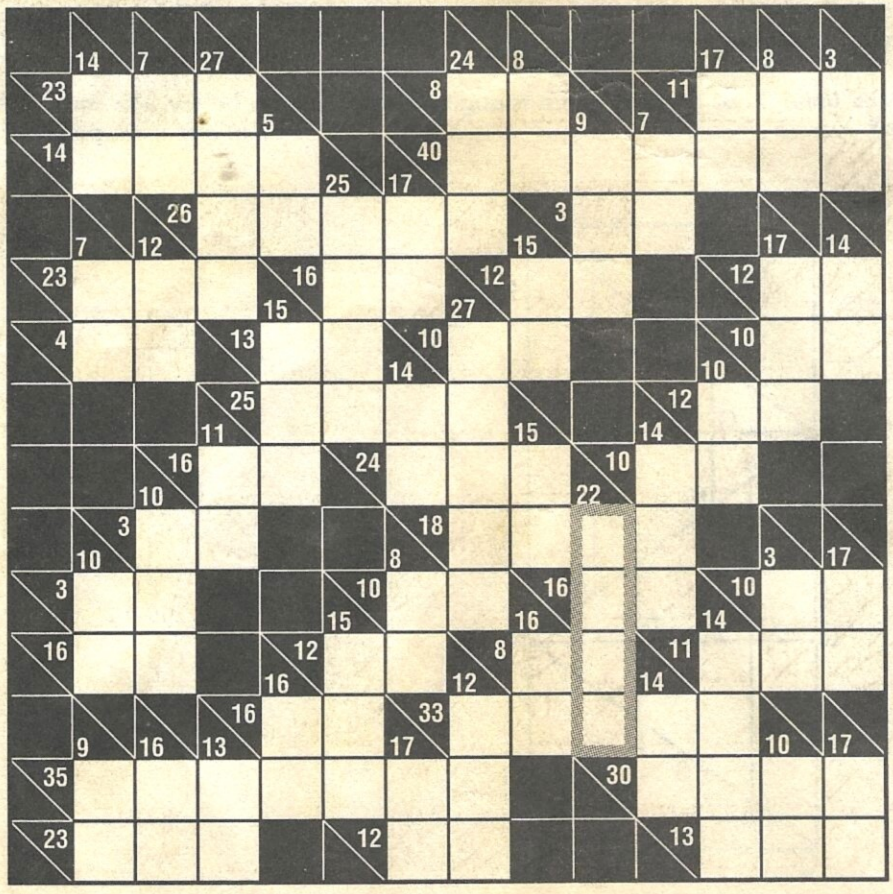


1.

The numbers in the black squares in these puzzles refer to the sums of the digits to be filled into the empty spaces. The number below a diagonal line is the sum of the numbers below it. The number above a diagonal line is the sum of the numbers to the right of it. Place one digit (1 to 9, no zeros) in each square.

IMPORTANT: No digit is used more than once in any particular digit combination. We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination for that area is listed on page 98.

Solutions are on page 87.



2.

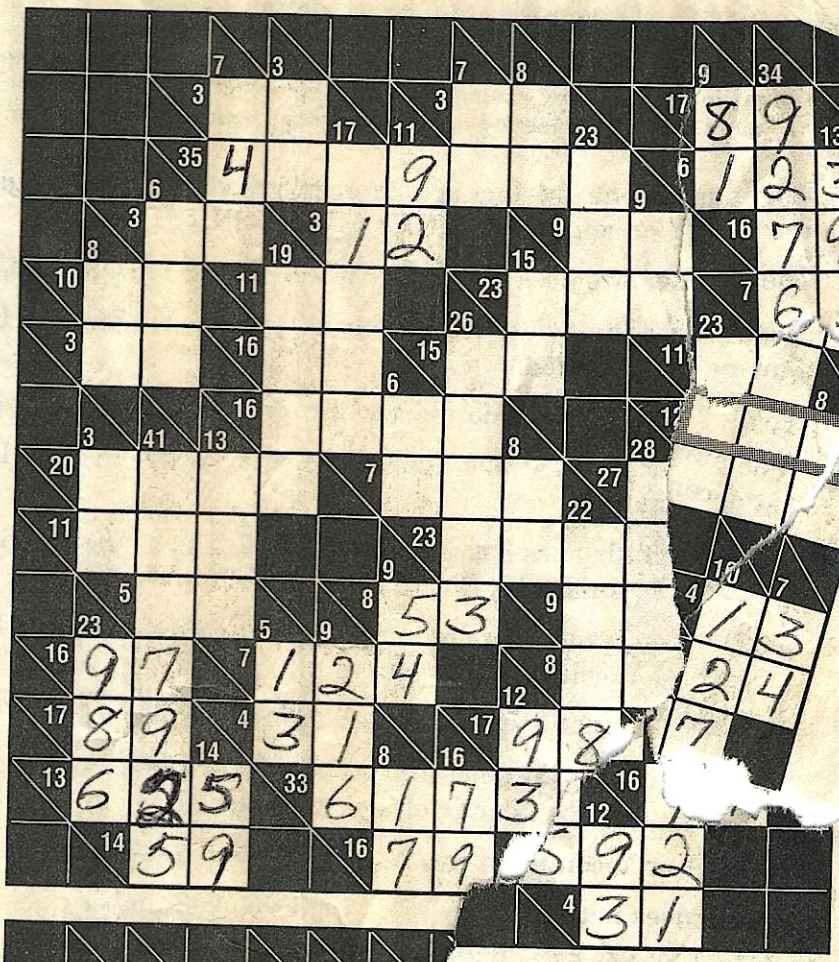
Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

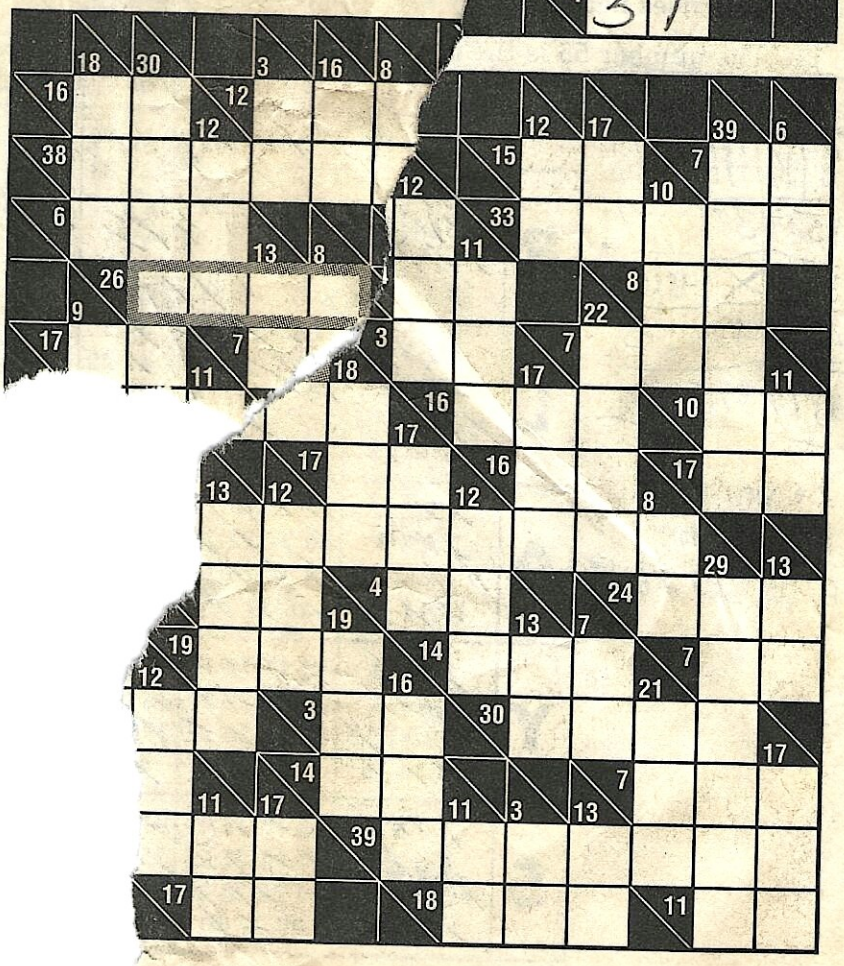
Solutions are on page 87.

Let's talk Turkey!

3.



4.



ARE CROSS SUMS MAKING YOU CROSS?

Our free how-to leaflet, "Aids in Solving Cross Sums Puzzles," may help!

This step-by-step instruction booklet explains the procedure to follow in solving Cross Sums puzzles. Send a stamped, self-addressed envelope (long-letter size, if possible, please) to:

Dell Math Puzzles and Logic Problems
Dept. XS
Dell Magazines
6 Prowitt S
Norwalk, CT 068

BINGO PLAYS 1

Each square on the Bingo playing card below contains 15 numbers (with the exception of the "FREE" space, has no number in it). Follow the clues below to eliminate numbers until you are left with only one number i square. No number will be repeated in any column. Then find your winning Bingo combination — just as in the numbers in only one row, column, or diagonal will fit the clues given. Note: It is helpful to go back and re clues a second time, remembering to eliminate those numbers which do not appear in the winning combinat

Solution is on pa

1. The number one does not appear on the card as a single-digit number, nor does it appear row A or Y or square PB, PG, LI, LN, LG, SN, or SO.
2. The number two does not appear in row P or S or column B, N, or O.
4. The num e num ber three does not appear in row P or Y, column I, G, or O, square SB, or in the ning combination.
5. The numb ber four does not appear in row S, column B or O, or square PG, LN, LG, or YG. ning comb
6. The numb er five does not appear in row A, square PN, LB, LI, YI, YN, or SB, or in the win colmn G ination.
7. The nur er six does not appear on the card as a single-digit number, nor does it appear i row P, mber e or square LI, LN, AI, YI, SI, or SN.
9. The number nir ber seven does not appear on the card as a single-digit number, nor does it appea row A or Y, colum r Y, column G, or square SI.
10. Zero does not appear ght does not appear in row L or square PI, PG, YB, YG, YO, SI, SN, SG, or S
11. The number 55 is the e does not appear on the card as a single-digit number, nor does it appear n N or O, or square PG or LI.

n row A, column G, or square LI, YI, or SO.

nly same-digit double-number combination on the card.

	B	I	N	G	O
P	9 10 11 13 14				
L	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 28 29 30	18 19 31 32 33 34 35 36 37 38 39 40 41 42	46 47 48 49 50 51 52 53 54 55 56 57 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
Y	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 35 39	49 53 57	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
S	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 35 39		61 62 63 64 65 66 67 68 70 71 72 74 75

	B	I	N	G	O
P	8	16	41	55	68
L	13	24	35	59	61
A	3	27	X	48	67
Y	5	28	40	52	65
S	10	19	37	51	75

The winning combination is: 16 24 27 28 19

KROSS NUMBER KRISS KROSSES

Fit the number combinations supplied with each diagram into their proper places in the puzzle squares. The combinations are in numerical order according to length. If you need help getting started, the numbers that go into the outlined areas are listed on page 98.

Solutions are on page 90.

3 Digits

145
169
476
583
697
832
962

4 Digits

1773
1838
1994
2684
2977
4232
4786
5192
5814
6248
6256
6727
7556
7589
7701
9009

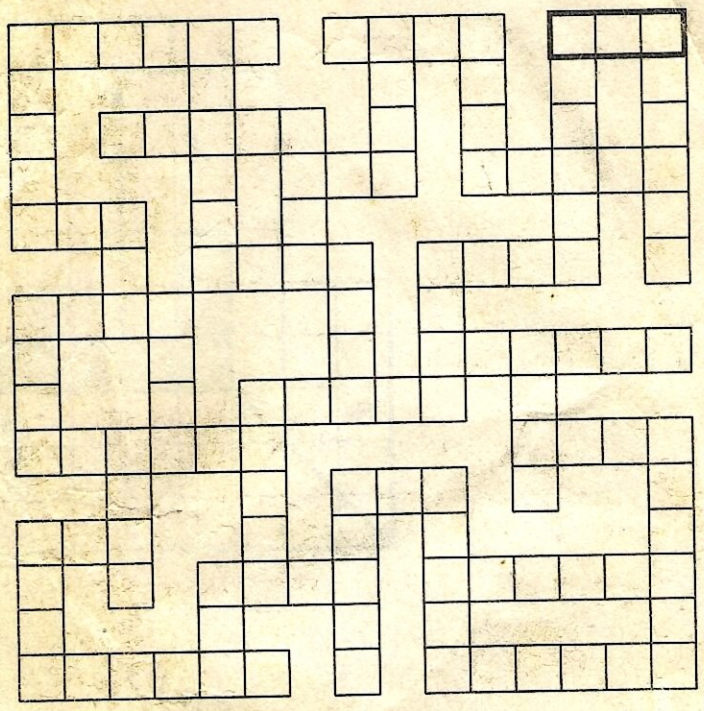
5 Digits

34681
40488
60208
63659
63874
75741
99376

6 Digits

256675
367162
422556
625507
627174
682317
694153
754615
845577
881265

1.



---

3 Digits

~~109~~
~~132~~
~~590~~
~~752~~
~~768~~
~~958~~

4 Digits

~~1340~~
~~1531~~
~~1622~~
~~3225~~
~~3922~~
~~3999~~
~~4675~~
~~5029~~
~~5816~~
~~5978~~
~~7406~~
~~8746~~

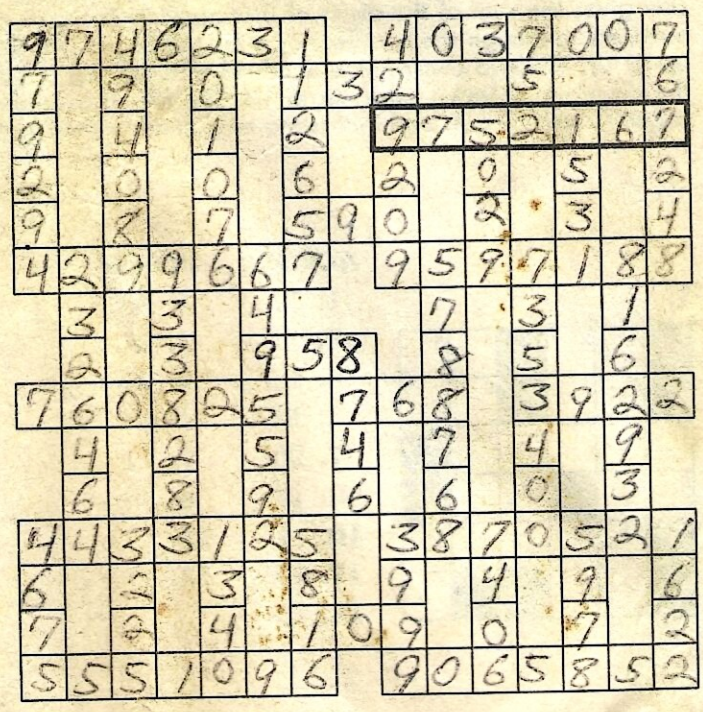
6 Digits

~~112657~~
~~201076~~
~~429209~~
~~494089~~
~~760825~~
~~767248~~
~~979294~~

7 Digits

~~2326464~~
~~3870521~~
~~4037007~~
~~4299667~~
~~4433125~~
~~5551096~~
~~5788768~~
~~6495592~~
~~7353400~~
~~8162932~~
~~9065852~~
~~9338283~~
~~9597188~~
~~9746231~~
~~9752167~~

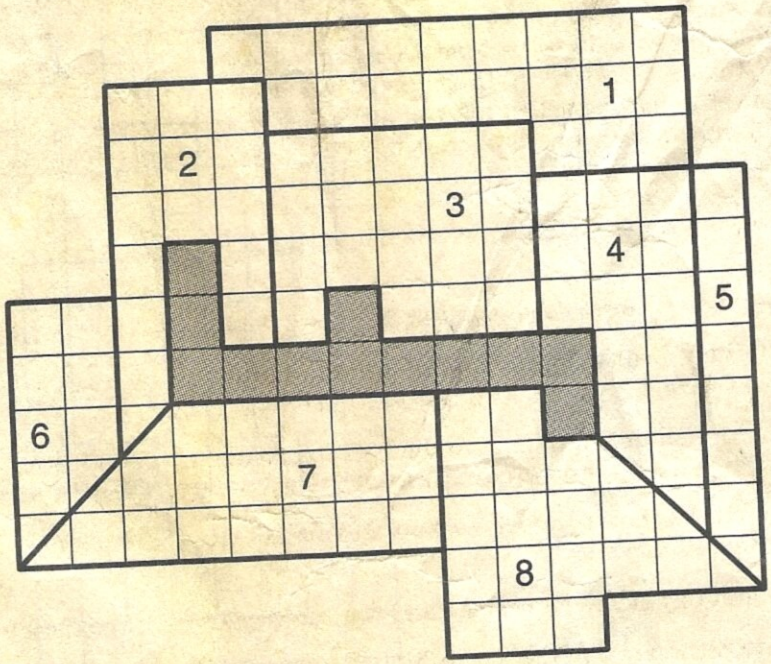
2.



HALF TIME

The diagram below has been broken up into eight numbered areas separated by heavy lines. Which numbered areas would have to be pencilled in so that the whole diagram will be half white and half gray? Any two half-squares can be counted as one square.

Answer is on page 97.

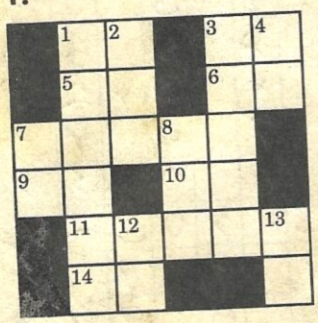


GRIDDIGITS

Griddigits are solved in crossword puzzle fashion using the numbers 1 – 9 instead of letters. Each Across and Down clue gives the sum of the digits of that answer. The trick here is that all answers consist of a series of consecutive numbers, although the numbers may be out of order in the answer. For example, in puzzle 1, 3-Across must add up to 11. The two consecutive numbers that add up to 11 are 5 and 6, but they can be placed in either order in the diagram. 4-Down adds up to 13. The two consecutive numbers that add up to 13 are 6 and 7. Since both answers require a 6, and that is the only number they have in common, that number must go into the shared box.

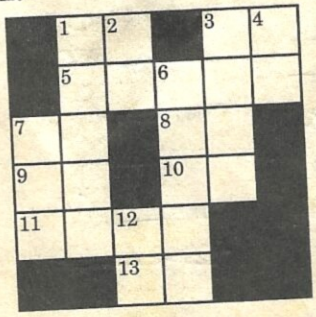
Solutions are on page 90.

1.



ACROSS	DOWN
1. 17	1. 39
3. 11	2. 21
5. 15	3. 20
6. 13	4. 13
7. 20	7. 11
9. 13	8. 6
10. 7	12. 9
11. 15	13. 7
14. 11	

2.

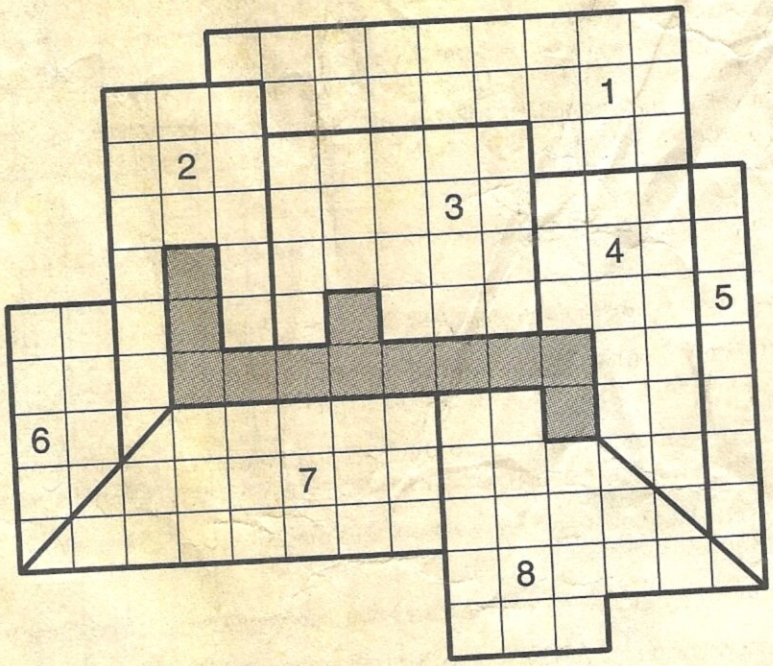


ACROSS	DOWN
1. 15	1. 25
3. 13	2. 17
5. 35	3. 22
7. 9	4. 15
8. 7	6. 15
9. 11	7. 15
10. 9	12. 5
11. 10	
13. 5	

HALF TIME

The diagram below has been broken up into eight numbered areas separated by heavy lines. Which numbered areas would have to be pencilled in so that the whole diagram will be half white and half gray? Any two half-squares can be counted as one square.

Answer is on page 97.

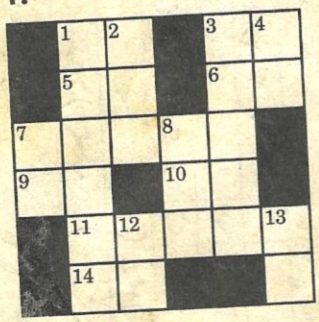


GRIDDIGITS

Griddigits are solved in crossword puzzle fashion using the numbers 1 – 9 instead of letters. Each Across and Down clue gives the sum of the digits of that answer. The trick here is that all answers consist of a series of consecutive numbers, although the numbers may be out of order in the answer. For example, in puzzle 1, 3-Across must add up to 11. The two consecutive numbers that add up to 11 are 5 and 6, but they can be placed in either order in the diagram. 4-Down adds up to 13. The two consecutive numbers that add up to 13 are 6 and 7. Since both answers require a 6, and that is the only number they have in common, that number must go into the shared box.

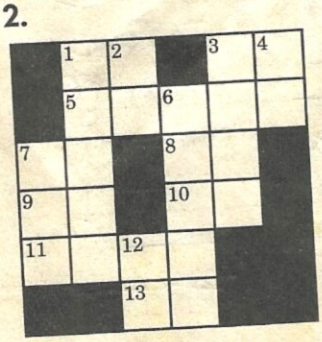
Solutions are on page 90.

1.



ACROSS	DOWN
1. 17	1. 39
3. 11	2. 21
5. 15	3. 20
6. 13	4. 13
7. 20	7. 11
9. 13	8. 6
10. 7	12. 9
11. 15	13. 7
14. 11	

2.



ACROSS	DOWN
1. 15	1. 25
3. 13	2. 17
5. 35	3. 22
7. 9	4. 15
8. 7	6. 15
9. 11	7. 15
10. 9	12. 5
11. 10	
13. 5	

KROSS NUMBER KRISS KROSSES

Fit the number combinations supplied with each diagram into their proper places in the puzzle squares. The combinations are in numerical order according to length. If you need help getting started, the numbers that go into the outlined areas are listed on page 98.

Solutions are on page 90.

3 Digits

145
169
476
583
697
832
962

4 Digits

1773
1838
1994
2684
2977
4232
4786
5192
5814
6248
6256
6727
7556
7589
7701
9009

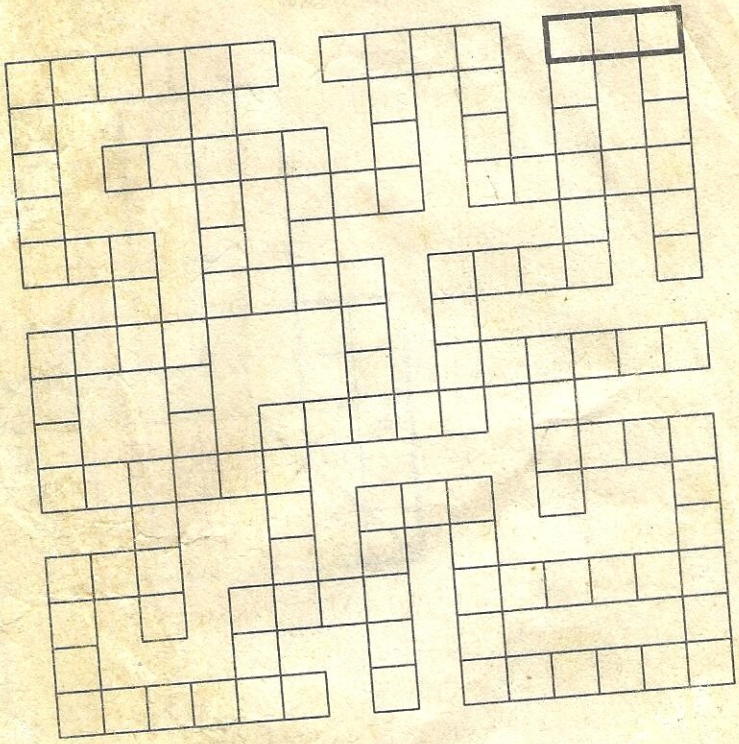
5 Digits

34681
40488
60208
63659
63874
75741
99376

6 Digits

256675
367162
422556
625507
627174
682317
694153
754615
845577
881265

1.



---

3 Digits

~~109~~
~~132~~
~~590~~
~~752~~
~~768~~
~~958~~

4 Digits

~~1340~~
~~1531~~
~~1622~~
~~3225~~
~~3922~~
~~3999~~
~~4675~~
~~5029~~
~~5816~~
~~5978~~
~~7406~~
~~8746~~

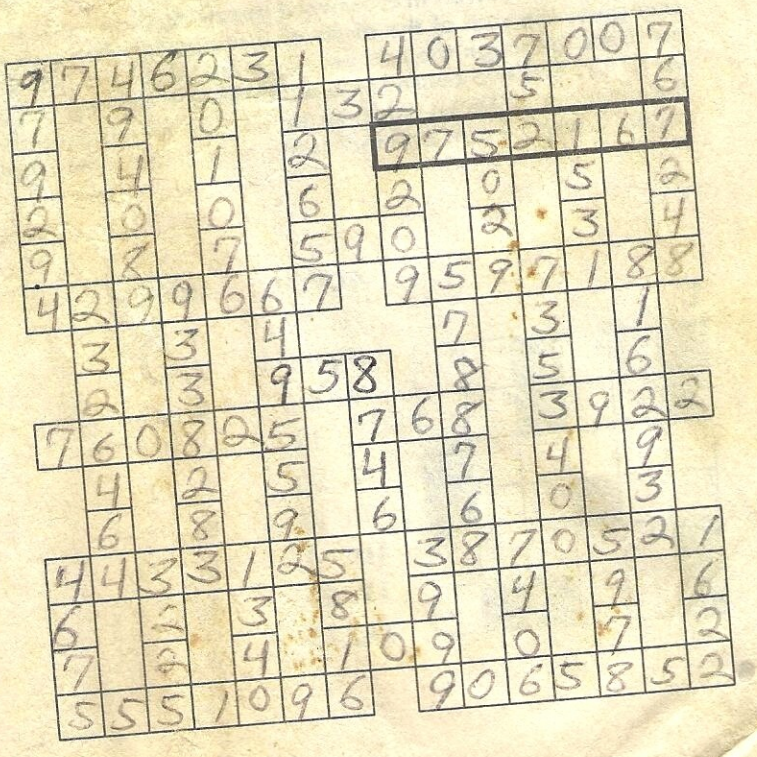
6 Digits

~~112657~~
~~201076~~
~~429209~~
~~494089~~
~~760825~~
~~767248~~
~~979294~~

7 Digits

~~2326464~~
~~3870521~~
~~4037007~~
~~4299667~~
~~4433125~~
~~5551096~~
~~5788768~~
~~6495592~~
~~7353400~~
~~8162932~~
~~9065852~~
~~9338283~~
~~9597188~~
~~9746231~~
~~9752167~~

2.



LOGIC PROBLEM 2

AT THE CAR WASH

by Mary Marks Cezus

It was a radiant spring day, with a clear, sunny sky and constant breeze. "Just the perfect day to drive down to the local service station and wash my car!" Alex Benz thought. When he got there, however, he discovered that other drivers were similarly inspired — all five self-service bays, which were numbered 1 to 5, from left to right, were occupied. As he waited for his turn, he recognized with surprise that the five cars being washed belonged to five of his friends. Each friend had recently purchased his or her car from a different local dealer, whose sticker was evident on the back of the car, and each vehicle sported vanity plates that Alex had previously seen. From this information and the clues below can you determine each friend's license plates, car dealer, and bay number?

1. Brad's car was neither the car purchased from Mountain Motors nor the car which had the LUV2FLY plates.
2. Josh's car was not in a bay next to the one that the car purchased from Spring Valley Wheels was in.
3. The car with the Friendly Frank's sticker (which wasn't Brad's car) was in the bay directly to the right of the one where the car with the GOLF4ME license plates was parked.
4. The car purchased from Mountain Motors (which did not have the GOLF4ME plates), Susan's car, and the car with the EZMONEY plates were in three consecutive bays, in some order.
5. The car with the FUNCAR plates (which was not Michelle's car) was in a bay which was to the right of the bay which had Kevin's car in it.
6. The cars in the two end bays were Brad's car and the car purchased from Spring Valley Wheels.
7. There was one bay in between the bay which had the car with the B COOL license plates and the bay which had the Mountain Motors car in it.
8. The car which had the EZMONEY plates (which was not the car from Sunset Sales) did not belong to Michelle.
9. Brad (who did not buy his car from Liberty Autos) did not own the car with the B COOL plates.

Solution is on page 93.

See page 6 for directions on how to use the solving chart.

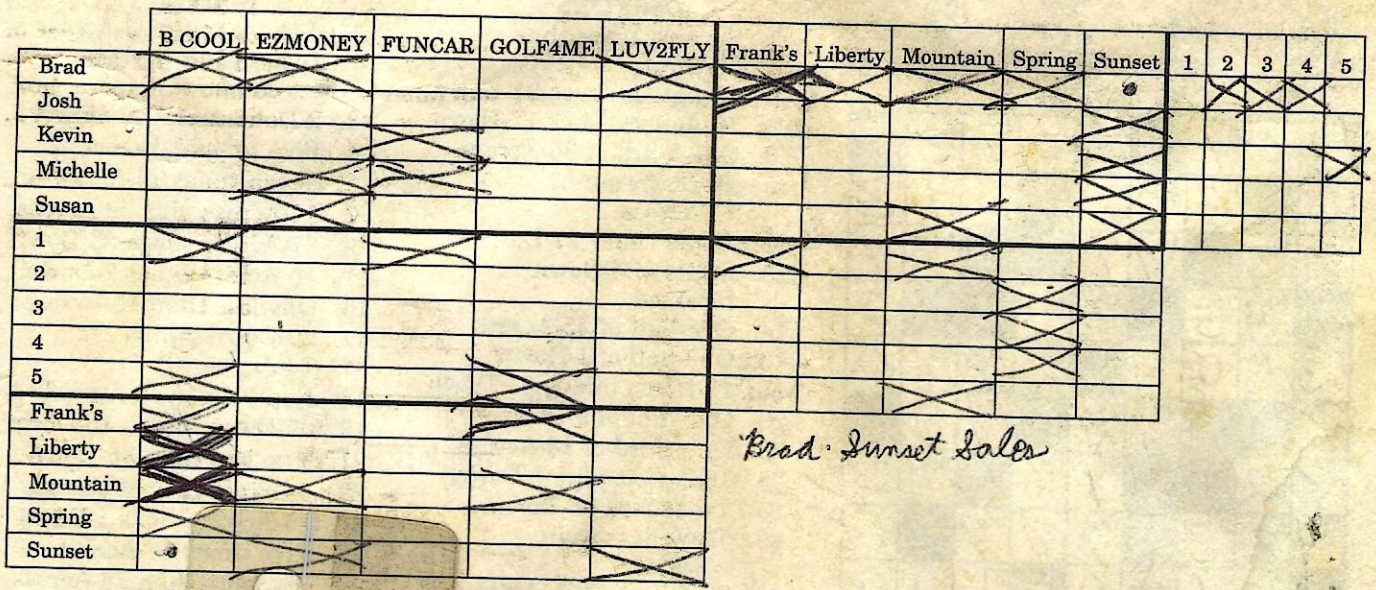
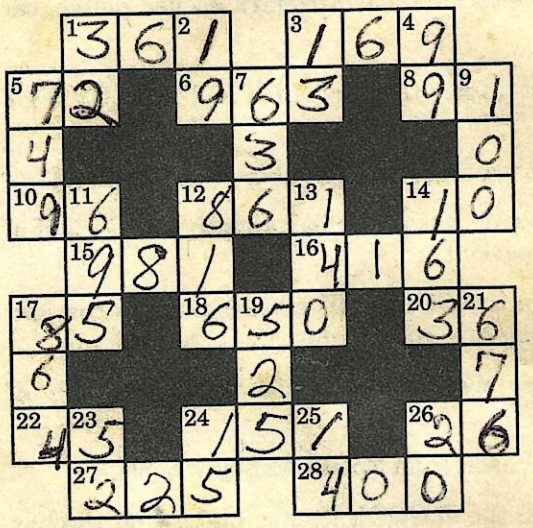


FIGURE LOGIC 2 & 3

by Linda Thistle

Directions for solving Figure Logics are on page 5.

Starting helps are on page 98.

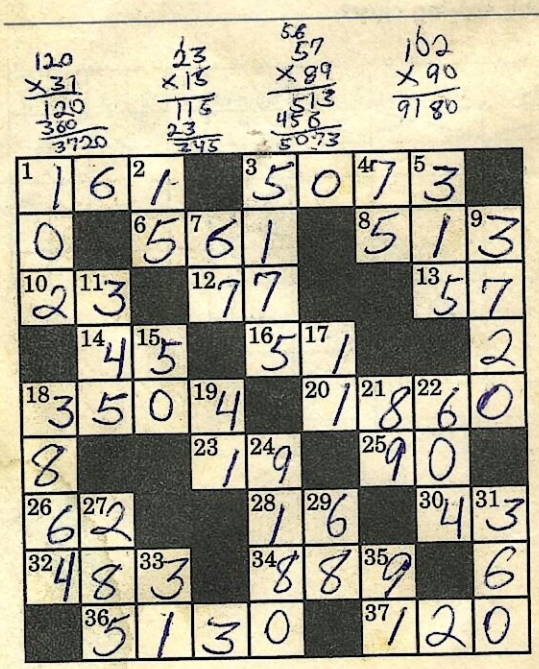


ACROSS

1. Square of 2-Down
3. Square of 3-Down
5. Product of the digits of 15-Across
6. Different multiples of three
8. Digits of 2-Down reversed
10. Three times 1-Down
12. 27-Across plus 7-Down
14. 20-Across minus 26-Across
15. The first digit is the square root of the number formed by the other digits
16. The first digit is the square root of the number formed by the other digits
17. 4-Down minus 25-Down
18. 5-Down minus 4-Down
20. One digit is two times the other digit
22. Consecutive digits in ascending order
24. 21-Down minus 19-Down
26. One digit is three times the other digit
27. Square of 24-Down
28. Square of 26-Down

DOWN

1. Consecutive digits in descending order
2. 22-Across minus 26-Across
3. One digit is three times the other digit
4. One less than 9-Down
5. The first digit is the square root of the number formed by the other digits
7. The first digit is the square root of the number formed by the other digits
9. Square of 14-Across
11. 17-Down minus 3-Across
12. 16-Across plus 28-Across
13. 14-Across times 25-Down
14. Digits of 1-Across reversed
17. The first digit is the square root of the number formed by the other digits
19. The first digit is the square root of the number formed by the other digits
21. Square of 26-Across
23. Four times 3-Down
24. One-third of 22-Across
25. One digit is four times the other digit
26. 5-Across minus 23-Down



ACROSS

1. Seventy more than 35-Down
3. 13-Across times 21-Down
6. 16-Across times 17-Down
8. One-tenth of 36-Across
10. 29-Down minus 14-Across
12. Seven times 17-Down
13. Digits of 4-Down reversed
14. One-half of 25-Across
16. One-half of 1-Down
18. 18-Down minus 31-Down
20. One-half of 9-Down
23. One-third of 13-Across
25. 10-Across plus 7-Down
26. Two times 33-Down
28. Three less than 23-Across
30. Two more than 19-Down
32. Three times 1-Across
34. 22-Down plus 27-Down
36. 3-Down minus 14-Across
37. 1-Across minus 19-Down

DOWN

1. 3-Down minus 3-Across
2. Digits of 16-Across reversed
3. 2-Down times 11-Down
4. Five times 2-Down
5. Seven times 14-Across
7. 16-Across plus 28-Across
9. 37-Across times 33-Down
11. 10-Across times 2-Down
15. One less than 16-Across
17. 29-Down minus 13-Across
18. Eight times 32-Across
19. 35-Down minus 15-Down
21. Two less than 35-Down
22. 6-Across plus 30-Across
24. 25-Across times 1-Down
27. Five times 13-Across
29. Six more than 26-Across
31. Three times 37-Across
33. 28-Across plus 2-Down
35. Digits of 23-Across reversed

Solutions are on page 89

LOGIC PROBLEM 2

AT THE CAR WASH

by Mary Marks Cezus

It was a radiant spring day, with a clear, sunny sky and constant breeze. "Just the perfect day to drive down to the local service station and wash my car!" Alex Benz thought. When he got there, however, he discovered that other drivers were similarly inspired — all five self-service bays, which were numbered 1 to 5, from left to right, were occupied. As he waited for his turn, he recognized with surprise that the five cars being washed belonged to five of his friends. Each friend had recently purchased his or her car from a different local dealer, whose sticker was evident on the back of the car, and each vehicle sported vanity plates that Alex had previously seen. From this information and the clues below can you determine each friend's license plates, car dealer, and bay number?

1. Brad's car was neither the car purchased from Mountain Motors nor the car which had the LUV2FLY plates.
2. Josh's car was not in a bay next to the one that the car purchased from Spring Valley Wheels was in.
3. The car with the Friendly Frank's sticker (which wasn't Brad's car) was in the bay directly to the right of the one where the car with the GOLF4ME license plates was parked.
4. The car purchased from Mountain Motors (which did not have the GOLF4ME plates), Susan's car, and the car with the EZMONEY plates were in three consecutive bays, in some order.
5. The car with the FUNCAR plates (which was not Michelle's car) was in a bay which was to the right of the bay which had Kevin's car in it.
6. The cars in the two end bays were Brad's car and the car purchased from Spring Valley Wheels.
7. There was one bay in between the bay which had the car with the B COOL license plates and the bay which had the Mountain Motors car in it.
8. The car which had the EZMONEY plates (which was not the car from Sunset Sales) did not belong to Michelle.
9. Brad (who did not buy his car from Liberty Autos) did not own the car with the B COOL plates.

Solution is on page 93.

See page 6 for directions on how to use the solving chart.

	B COOL	EZMONEY	FUNCAR	GOLF4ME	LUV2FLY	Frank's	Liberty	Mountain	Spring	Sunset	1	2	3	4	5
Brad															
Josh															
Kevin															
Michelle															
Susan															
1															
2															
3															
4															
5															
Frank's															
Liberty															
Mountain															
Spring															
Sunset															

Brad · Sunset Sales

WORD ARITHMETIC

These are long-division problems in which letters are substituted for numbers. Solve the problem; determine the number value of each letter; and, when the letters in each one have been arranged in order from 0 to 9, they will spell out a word or words.

Answers are on page 98.

1.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          SIP
    ASH | RIDES
          ETA
           TCE
          ASH
           IAIS
          ISEI
           IPI
```

2.

E _ _ _ _ _ _ _ _ S
0 1 2 3 4 5 6 7 8 9

```
          ARE
    MAMA | CAMERAS
          CSMSY
           ASIEA
          CMVMO
           MCROS
          YVAOI
           YSEA
```

3.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          NAN
    ALE | LEANS
          ALE
           CUMN
          SERA
           NNMS
          ALE
           ABC
```

4.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          ASSET
    TOT | TOYLESS
          TOT
           ALES
          ATFF
           FSCS
          ACKL
           ACT
```

5. JUSTBECALM
0 1 2 3 4 5 6 7 8 9

```
              MET
    BALM | BECAUSE
          BTUJU
           SEAJS
          STMBE
           UAEAE
          UBTCA
           TSJL
```

6.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          NOT
    LEAN | STEEPS
          NTAP
           TRPP
          RPAR
           LEERS
          LLLCP
           LLOT
```

7. GREAT _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
              TAR
    SEC | ARTIST
          ECRU
           EAES
          ERIS
           RTGT
          SEC
           USM
```

8.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          BOB
    MITE | TICKETS
          TOOTO
           SBMMT
          SSEMB
           TMEIS
          TOOTO
           UMTK
```

9. MARCHWINDS
0 1 2 3 4 5 6 7 8 9

```
              WAND
    HAS | RAISINS
          RMSW
           NHI
          HAS
           CRNN
          RSCC
           CHHS
          CCWR
           SN
```

LOGIC PROBLEM 3

WEIRD SCIENCE

by Susan Zivich

The students of Stuy High School waited with excitement for the winners of the annual Science Fair to be announced. The top five prize-winners would be representing their school at the national level. When the judges announced their picks, there was so much loud cheering that the Spectator reporter could not hear everything that was said. From the above information and the following notes she had jotted down, however, she was able to determine each winner's full name, class level, project name, and prize. Can you do the same?

1. Amanda received a higher prize than the sophomore.
2. Kevin did not receive Second Prize, but was among the top five.
3. Douglas is the only senior to win a prize.
4. Kerns's project and "Dandelion Mutations" were the two Honorable Mention winners.
5. Amy Edmonds and Connors were standing next to each other when their names were announced.
6. "Squeeze Cheese Chemistry" was the freshman's project. A student in a higher grade created "Pretzel Engineering."
7. Greg congratulated Rachel on her Third Prize win.
8. Amanda's project was entitled "Roller Coaster Physics."
9. Kevin and the First Prize winner are both juniors.
10. The Truman boy's project was entitled "Jelly Bean Teleportation."

Solution is on page 93.

See page 6 for directions on how to use the solving chart. NOTE: Since more than one student received an Honorable Mention, and two of the students were in the same level class, you will not be able to enter a definite "no" in the boxes of each row and column once you enter a definite "yes."

	Conn.	Doug.	Ed.	Kerns	Tru.	fresh.	soph.	jun.	sr.	"Dande."	"Jelly"	"Pretz."	"Roller"	"Squeeze"	1st	2nd	3rd	H.M.
Amanda																		
Amy																		
Greg																		
Kevin																		
Rachel																		
1st																		
2nd																		
3rd																		
H.M.																		
"Dande."																		
"Jelly"																		
"Pretz."																		
"Roller"																		
"Squeeze"																		
fresh.																		
soph.																		
jun.																		
sr.																		

LOGIC PROBLEM 4

JADE-EYE APPRENTICES

by David Champlin

Long long ago, in a nebula far, far away, four young would-be Jade-Eye warriors appeared one by one before the Jade-Eye council, each hoping to be accepted as an apprentice Jade-Eye knight. Each candidate was sponsored by a different established Jade-Eye (one sponsor was named Dobi-Don), and each possessed a particular talent which he hoped would impress the council. Two of the young hopefuls were glad to hear of their acceptance, while the others were crushed to hear that the council, regretfully, rejected their bids for apprenticeship. From this information and the following clues, can you determine each candidate's sponsor, special talent, and tryout order, as well as whether or not he was accepted?

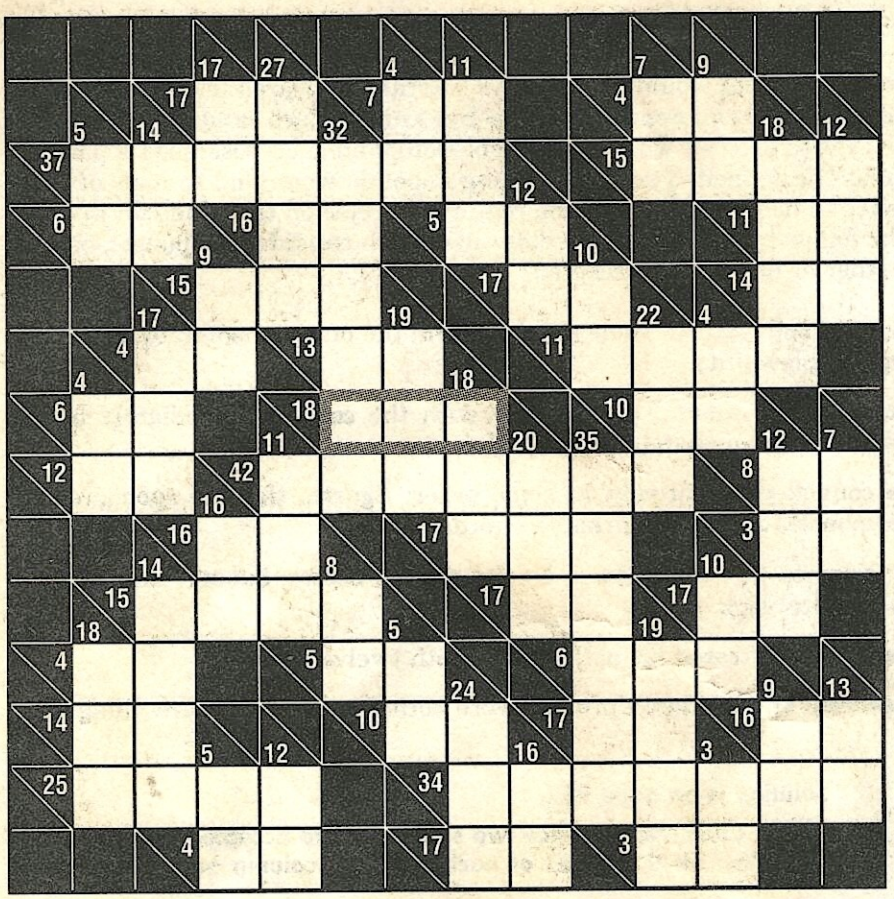
1. The first three to appear before the council were, in some order: Querli, the one sponsored by Yoga, and the one who demonstrated his remarkable agility.
2. The applicant who possesses extraordinary mental powers met with the council immediately before Anaken's candidate, who showed his stuff immediately before Nulunu.
3. These three applicants faced the council consecutively, in some order: Egarth, the one sponsored by KarKar Kinks, and the one who demonstrated his remarkable swordsmanship.
4. Of the two successful candidates, Xamato was interviewed by the council before, but not immediately before, the one who demonstrated his total lack of fear.
5. KarKar's candidate and the one who demonstrated his agility were both twelve years old.
6. Egarth (who didn't display fearlessness) and Anaken's protégé were both from very obscure villages on small outpost planets.

Solution is on page 93.

See page 6 for directions on how to use the solving chart. NOTE: Since two students were accepted and two were rejected, you will not be able to enter a definite "no" in the boxes of each row and column once you enter a definite "yes."

	Anaken	Dobi-Don	KarKar	Yoga	agility	fear-less.	ment. pwrs.	sword.	1st	2nd	3rd	4th	acc.	rej.
Egarth														
Nulunu														
Querli														
Xamato														
acc.														
rej.														
1st														
2nd														
3rd														
4th														
agility														
fearless.														
ment. pwrs.														
sword.														

CROSS SUMS

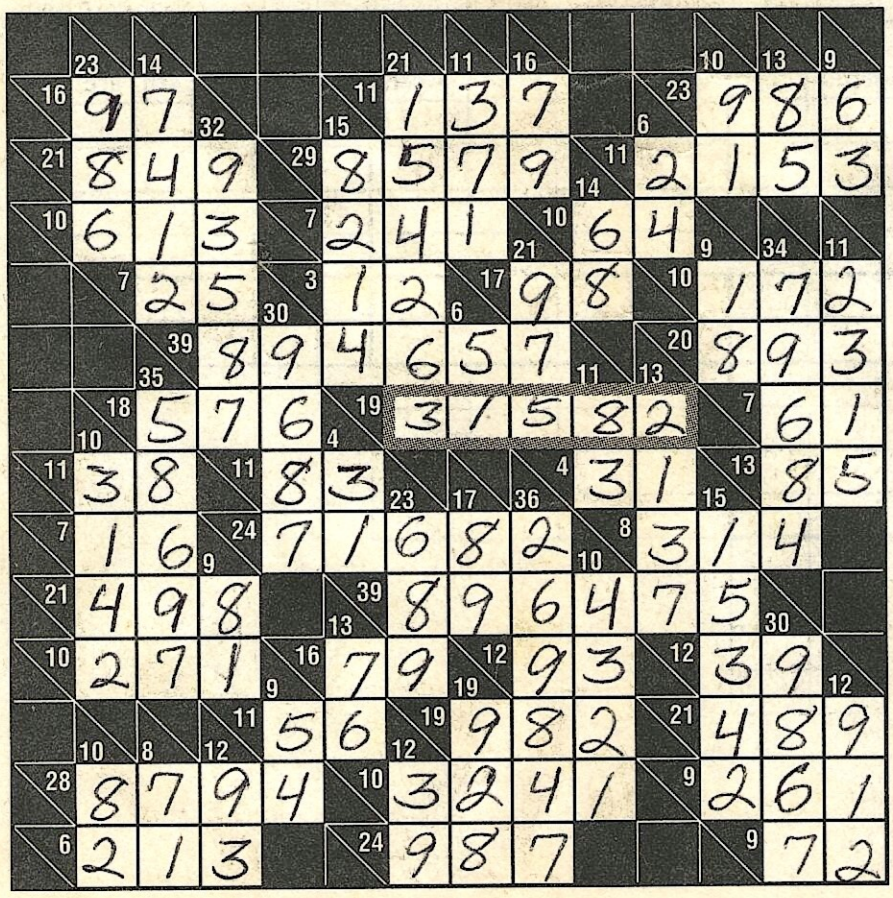


5.

We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 87.

Directions for solving are on page 8.



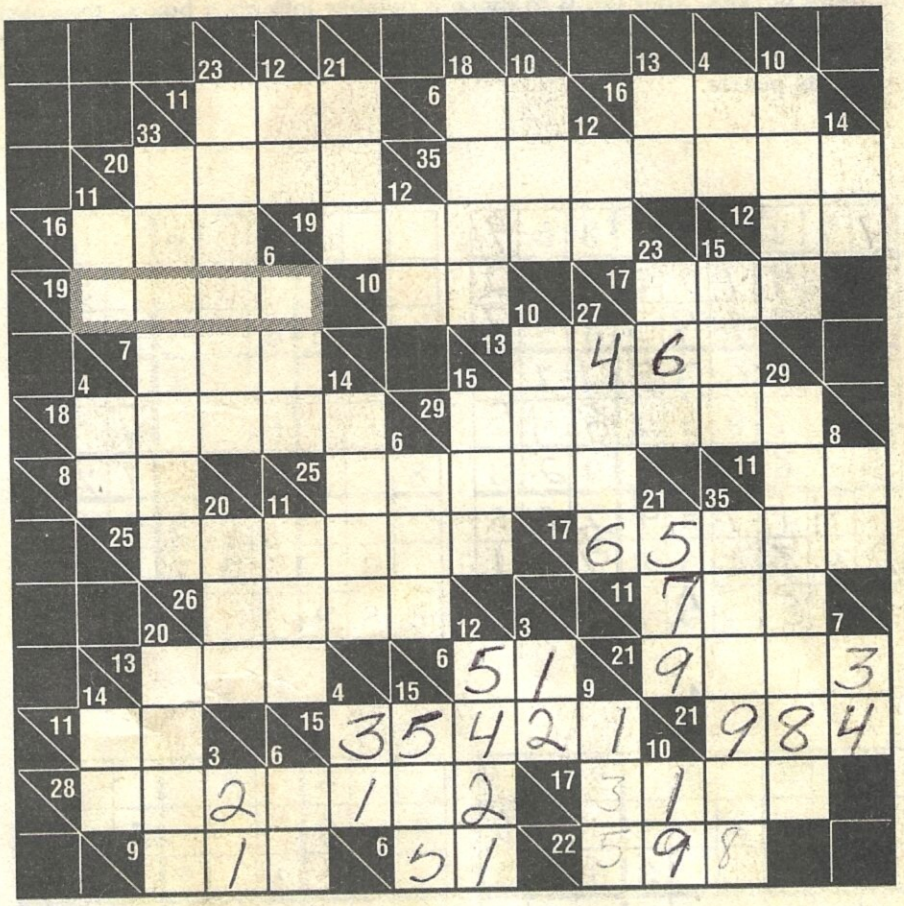
6.

Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

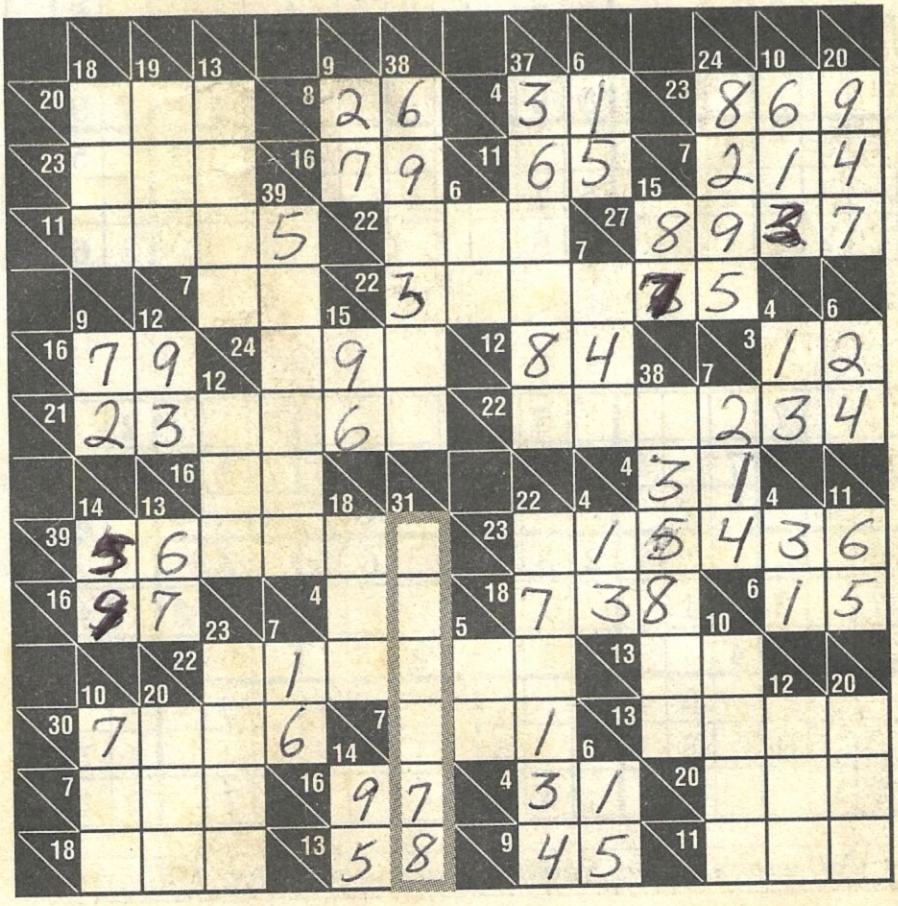
CROSS SUMS

Solutions are on page 87.

7.



8.



NUMBER PLACE

In these puzzles, your job is to place a number into each box so that each row across, each column down, and each small 9-box square within the larger square (there are 9 of these) will contain each number 1 through 9. Remember that no number may appear more than once in any row, column, or 9-box square; this will help you solve the puzzle.

Solutions are on page 90.

1.

1	7	2	5	8	4	3	6	9
9	3	4	1	7	6	5	8	2
6	5	8	2	9	3	4	1	7
4	2	9	6	3	5	1	7	8
3	8	7	9	1	2	6	4	5
5	1	6	8	4	7	9	2	3
8	4	1	7	5	9	2	3	6
2	9	3	4	6	8	7	5	1
7	6	5	3	2	1	8	9	4

2.

		1	8		9		6	
	2	8		1			3	
		5	4			2	1	
2	5				4			
3			5			9		6
8			3	6		7	2	
				5	8	6		4
	6			3	7			2
5	8	2						3

3.

	1	3						4
7				4	6		2	
6					8	5		7
9			8			7	4	
		7	9	3				2
	4	2		5		3		
		9	6				3	
			2		7		6	
5	2					1		9

4.

	5	3		9		2		
1			2		4			5
8					3	6		9
		5					6	7
9	7			4	2			
				5	6	8	9	
5	9		1					4
		1	9			5	7	
	2		4	3			8	

5.

	1	6		8				2
9		3				5		
			1		7	3		
2	5			3			8	
8	4		9	1				
				4		7	9	5
	3	4			1		5	
1		5	6		9			
			3			8	6	1

6.

		7				1	9	8
9		2	7			6		
	5		8	9	3			
1	2		9	5				
		5			4	7	2	
7			6			5	3	
		9		7	6			5
	4			3	2			6
3	7						1	2

7.

		7					5	9
		1	7		5	4		
8	4		9	2				
6					7	2	8	
7		2	3	1				
	9		4			5	1	
	7			5	4	9		
		9		3	1			5
5	2						4	8

8.

		4	5			2		1
3	9		7	1				
	2		6				9	
	6	5		4				
					3		4	7
4					5	1		6
	7	9		5	1			
1		8				4	7	
			9	7		6	1	

9.

		7			9		8	
		2		5	6		7	
8						1		6
	2		5		8	4		
	8					7	2	5
3		1	7	2				
2	1	8	3					
				6	5		4	2
	4		9			3		7

***Collector's Series Number Place** is here! Over 150 of your favorites. See facing page to order.*

A Whole Book Of Your Favorite Puzzles!

As an experienced solver, you know which puzzles you want. That's why we're offering you these special collections of the puzzles you like best.

Each 64-page volume is packed with *only one kind of puzzle!* You'll enjoy hours of solving fun with ***Cross Sums, Figgerits, Tanglewords®*** or any of these popular favorites.

Available only by mail. To order, just fill out the coupon below and mail it back to us with your payment today.

PUZZLE TYPE	CODE	VOLUMES AVAILABLE (Circle your choices)
Anacrostics	ACS	9 10 14 15 16 17 18 19
Bible Crosswords	BXW	1 2
Bowl-A-Score Challenger	BAS	1 2
Crosscodes	CRO	1
Cross Sums	SUM	28 29 30 31 32 33 34 35
Cryptic Crosswords	CRX	1
Cryptograms	DCG	1 2 3 4
Cryptoquiz Special	CQS	1
Cryptoquizzes	CPQ	1 2 3 4
Diagramless Crosswords	DGX	1
Expert and Challenger Crosswords	XEC	1 2
Figgerits	FIG	2 3 4 5 6 7 9 10
Figure Logic	FGL	1 2 3
Kriss Kross	KRK	1 2
Laddergrams	LDG	1
Missing Links	MLK	1
Number Place	NBP	1 2 3 4 5
Quotation Puzzles	QPZ	1 2 3 4
Solicross™	SOL	2 4 5 6 7 8 9 10
Spellathon	SPL	1 2
Tanglewords®	TNG	37 38 39 40 41 42 43 44
Word Mine	WMI	2 3

DELL MAGAZINES DIRECT
6 Prowitt St., Suite C
Norwalk, CT 06855-1220

☑ **YES!** Send me the Dell Collector's Series volumes I've circled for just $3.95 plus $1.25 shipping and handling each ($5.20 each, U.S. funds). My payment of $ _____ is enclosed.

Name _____
(Please Print)

Address _____

City _____

State _____ ZIP _____

Make checks payable to Dell Magazines Direct. Allow 8 weeks for delivery. CT Residents: Please pay $5.51 per copy to include state sales tax. Add an additional $3 (U.S. funds) to your total for delivery outside the U.S.A. Offer expires 12/31/02. 012A-CSCDL4

BINGO PLAYS 2

Solution is on page 90.

Directions for solving Bingo Plays are on page 10.

1. The number one does not appear on the card as a single-digit number, nor does it appear in column G or square PO, LI, LO, AI, AO, YI, YN, YO, SB, or SN.
2. The number two does not appear on the card as a single-digit number, nor does it appear in column G or O or square PI, LN, YN, or SN.
3. The number three does not appear in row P, column I, G, or O, square LN or YB, or in the winning combination.
4. The number four does not appear on the card as a single-digit number, nor does it appear in row A, column I, or square PG, PO, LB, LO, or YB.
5. The number five does not appear in row Y or S, column B, or square PO, LI, or AO.
6. The number six does not appear on the card as a single-digit number, nor does it appear in row A, column G, square LI, LO, YI, SI, or SN, or in the winning combination.
7. The number seven does not appear on the card as a single-digit number, nor does it appear in row Y or S or square PI, PG, or LG.
8. The number eight does not appear on the card as a single-digit number, nor does it appear in row S or square PI, PG, YN, or YO.
9. The number nine does not appear in row A, column I or O, or square PG, LG, YB, YN, SB, or SN.
10. Zero does not appear in column N or in the winning combination.
11. The number 11 is the only same-digit double-number combination on the card.
12. The number 34 is the only consecutive-digit (in either order) combination on the card.

	B	I	N	G	O
P	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
L	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	FREE	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
Y	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
S	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

	B	I	N	G	O
P	14	16	42	50	68
L	9	27	41	58	75
A	13	25	X	57	70
Y	11	28	36	48	64
S	3	20	34	49	61

The winning combination is:
9 27 41 58 75

Is Teri Hayley Mills?

Is Carolyn Chopped Liver?

FIGURE LOGIC 4

by Linda Thistle

Starting help is on page 98.

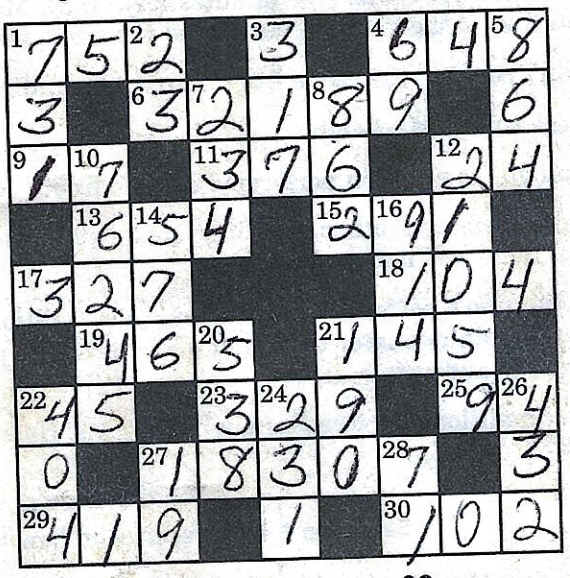
Directions for solving Figure Logics are on page 5.

ACROSS

1. One digit is the sum of the other digits
4. Different even digits in some order
6. Sum of the digits is 2-Down
9. Digits of 28-Down reversed
11. One-half of 1-Across
12. One digit is two times the other digit
13. Consecutive digits in descending order
15. Sixty more than 24-Down
17. One-half of 13-Across
18. Three hundred less than 22-Down
19. Consecutive digits in some order
21. One digit is the sum of the other digits
22. Consecutive digits in ascending order
23. Two more than 17-Across
25. Ten less than 18-Across
27. Sum of the digits is 27-Down
29. 30-Across plus 3-Down
30. Six times 9-Across

DOWN

1. Five hundred more than 24-Down
2. Consecutive digits in ascending order
3. Digits of 1-Down rearranged
4. 12-Across plus 22-Across
5. Digits of 4-Across rearranged
7. Digits of 26-Down reversed
8. One digit is the sum of the other digits
10. Sum of the digits is 12-Across
12. Sum of the digits is 9-Across
14. Consecutive digits in some order
16. Digits of 29-Across reversed
20. One digit is the sum of the other digits
21. Ten times 27-Down
22. One digit is the sum of the other digits
24. Three less than 7-Down
26. One-half of 5-Down
27. Fifty less than 4-Down
28. 25-Across minus 2-Down

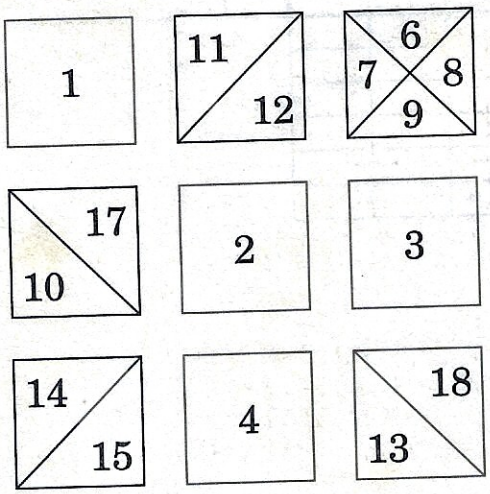


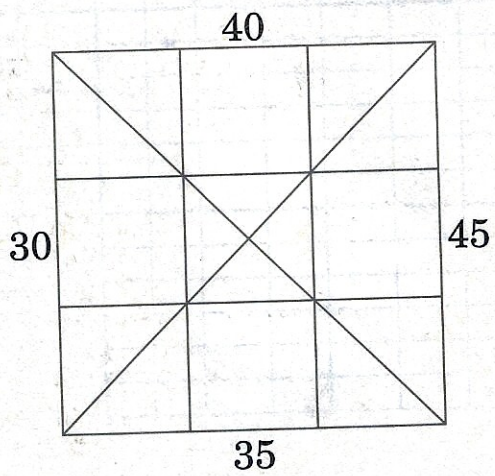
Solution is on page 89

TRIANGULAR SQUARE

Can you place the nine numbered squares below into the diagram so that the four numbers in each of the diagram's four large triangles, when added together, equal the number given next to that triangle? Each square's pattern must match the pattern of the diagram square in which it is placed, and you may not rotate the squares.

Solution is on page 89.





LOGIC PROBLEM 5

by Diane Yoko

NEXT!

Angie and five other members of Logicville's girls' theater club planned to audition for the local theater's upcoming production of "The Taming of the Shrew." As part of their preparations, the girls held mock auditions at one member's house, where each performed her audition scene, taken from a different Shakespeare play. The member who hosted already felt confident about her scene, and chose not to participate. The other five, however, simulated the real audition experience as closely as possible by drafting their friends and family as "judges," and assigning themselves different audition times. From this information and the following clues, can you determine the full names of the hostess and her five friends (one last name is Kerr), the scene each chose, and each guest's mock audition time?

1. Mona's audition was before Ms. Perry's.
2. The hostess, whose scene wasn't the one from "King Lear," praised the first girl to audition, who went at 12:00.
3. Mona's audition time was five minutes later than Ms. Pitt's; Ms. Pitt's audition time was ten minutes later than that of the girl who performed the scene from "Cymbeline."
4. Violet didn't perform the scene from "Romeo and Juliet."
5. The hostess wasn't Ms. Leigh.
6. The second girl to audition performed a scene from "Twelfth Night."
7. Mona and at least one other girl auditioned before the girl who performed a scene from "Hamlet," who isn't Belle; Belle was not the hostess.
8. Denise, who didn't perform "Hamlet," had her audition ten minutes after Ms. Hansen, whose audition time was five minutes later than that of the girl who performed "The Merchant of Venice," who was not the first girl to audition.
9. Ms. Bonner auditioned before Kara, who isn't Ms. Hansen.

Solution is on page 93.

See page 6 for directions on how to use the solving chart.

	Bonn.	Hans.	Kerr	Leigh	Per.	Pitt	"Cym."	"Ham."	"King"	"Merch."	"Rom."	"Twel."	12:00					host.
Angie																		
Belle																		
Denise																		
Kara																		
Mona																		
Violet																		
12:00																		
hostess																		
"Cym."																		
"Hamlet"																		
"King"																		
"Merch."																		
"Romeo"																		
"Twelfth"																		

WORD ARITHMETIC

See page 15 for solving directions.

Answers are on page 98.

10.

0 1 2 3 4 5 6 7 8 9

```
          READ
RAIN | INVADER
       RAIN
       CRID
       BKDD
       RIIDE
       RIDAN
          RIKR
```

11. FAIRSPOKEN

0 1 2 3 4 5 6 7 8 9

```
          617
          OAK
8694 | 53656548
EONS | PROPOSE
       52164
       PIAOS
       14924
       ASNIS
       8694
       EONS
       62308
       OIRFE
       60858
       OFEPE
       1450
       ASPF
```

12. EASYPROFIT

0 1 2 3 4 5 6 7 8 9

```
            2019
            SEAT
2489 | 50265928
SPIT | RESORTS
       4978
       PTFI
       4859
       PIRT
       2489
       SPIT
       23702
       SYFES
       22401
       SSPEA
       2301
       AYEA
```

13. BEDOENAILS

0 1 2 3 4 5 6 7 8 9

```
            8152
            LEND
57511 | 468870871
NINE | FALLIBLE
       46008
       FABBL
       87900
       LISB
       57511
       NINE
       30398
       OBOSL
       28755
       DLINN
       16431
       EAFOE
       11502
       EENBD
       4929
       FSDS
```

14.

0 1 2 3 4 5 6 7 8 9

```
          LED
WELD | SHIELDS
       NDSER
       ERHWD
       WELD
       SLLHS
       SSIHE
       UEHN
```

15. ITSANEWMUG

0 1 2 3 4 5 6 7 8 9

```
            639
            WAG
45311 | 28995211
NEAT | SUGGEST
       2718
       SMTUW
       18092
       TUIGS
       13593
       TAEGA
       44991
       NNGGT
       40779
       NIMMG
       4212
       NSTS
```

16. BRIGHTSNOW

0 1 2 3 4 5 6 7 8 9

```
          1285
          RIOT
7206 | 9264273
NIBS | WISHING
       7206
       NIBS
       20582
       IBTOI
       14412
       RHHRI
       61707
       SRNBN
       57648
       TNSHO
       40593
       HBTWG
       36030
       GSBGB
       4563
       HTSG
```

17.

0 1 2 3 4 5 6 7 8 9

```
          LIE
ERR | YODELS
      YOXL
      RRL
      ERR
      XSXS
      ILRE
      IAR
```

18. JUGGHANDLES

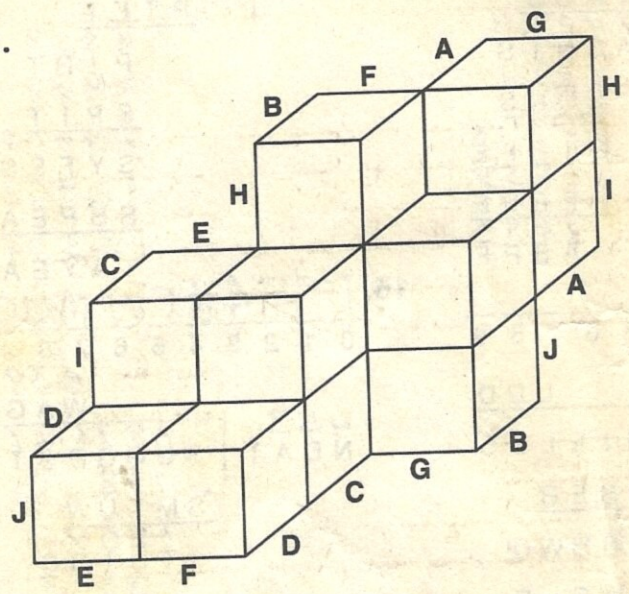
0 1 2 3 4 5 6 7 8 9

```
            6169
            DUDS
9542 | 58867899
SNAG | NEEDLESS
       57252
       NLGNG
       18158
       UDUNE
       9542
       SNAG
       66169
       DDUDS
       57252
       NLGNG
       89179
       ESULS
       85878
       ENELE
       3301
       HHJU
```

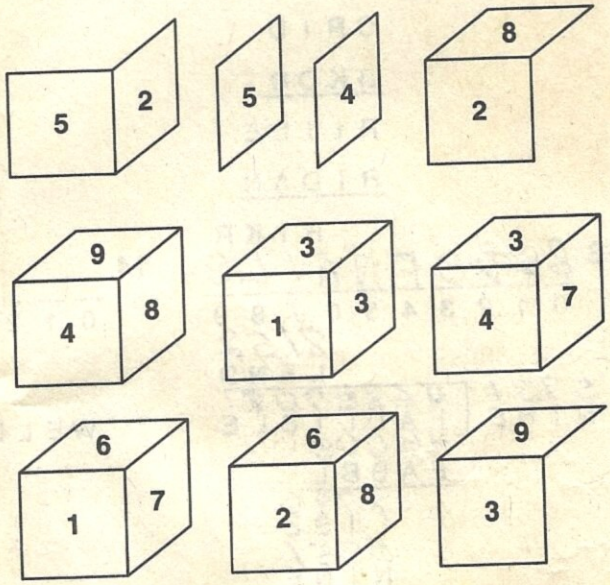
ON THE SURFACE

You'll need both mathematical and spatial skills to solve this one! For each puzzle, fit the pieces on the right into the diagram on the left so that the numbers on the surfaces of each lettered row (from A to A, B to B, etc.) add up to that puzzle's target number. Do not rotate the pieces or attempt to fit a piece into a section of the diagram that does not match the piece exactly. For example, the two panels at the end of row J in puzzle 1 can only be covered by the panels with the numbers 5 and 2; this means that row B, which crosses row J at its rightmost panel, also contains the number 2. Use the target number and logic to figure out which other panels belong in each of those rows; and continue in the same manner until all the pieces have been placed. **Solutions are on page 88.**

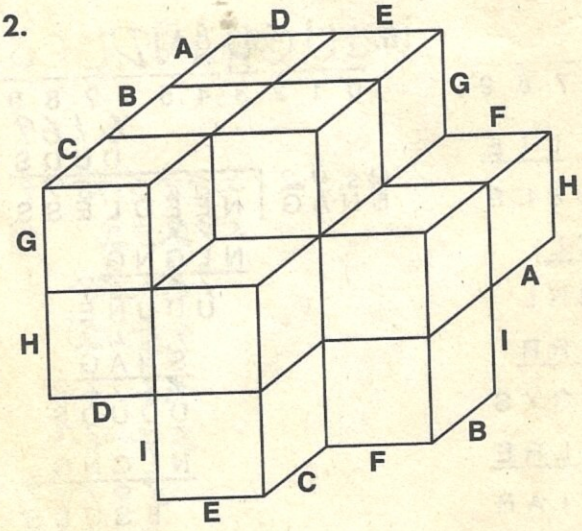
1.



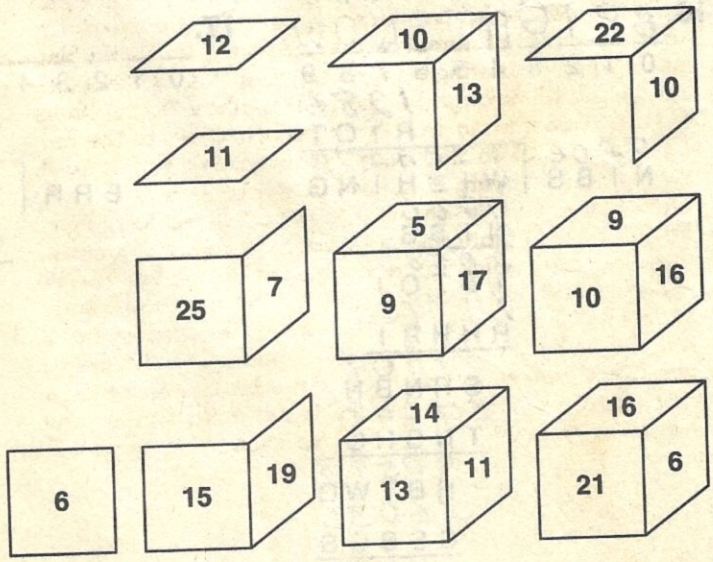
TARGET NUMBER: 22



2.



TARGET NUMBER: 66

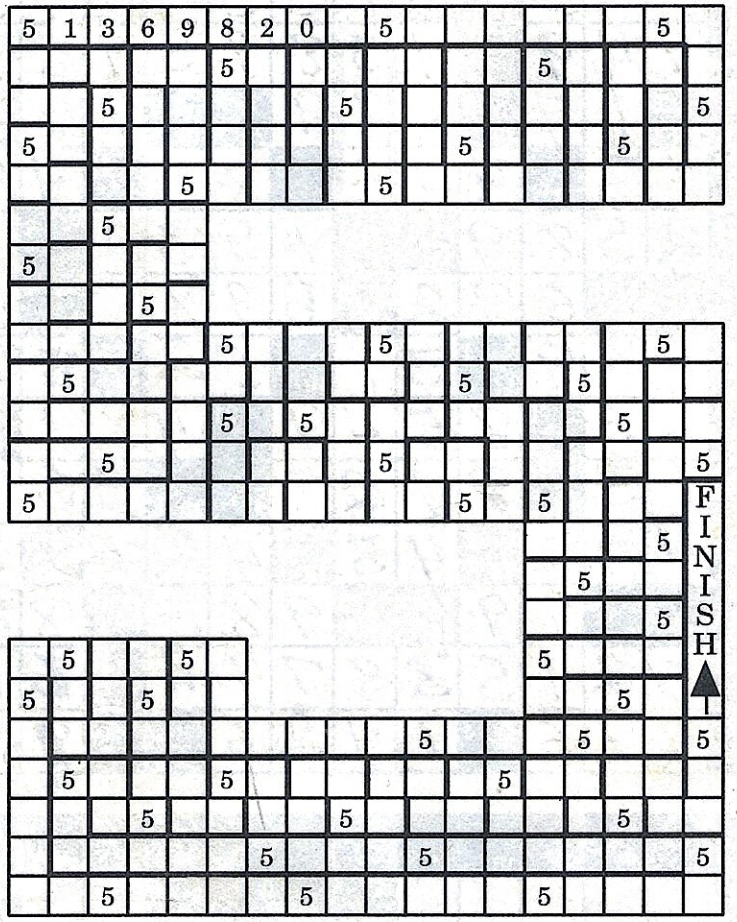


FIVE BY FIVE

Starting at the top-left corner, see if you can wend your way to Finish by entering the given numbers into the diagram in a continuous chain; that is, the last digit of each entry is the first digit of the next. The correct route through the diagram is marked by heavy lines. All of the 5s have been entered for you, as has the first number in the chain.

Solution is on page 91.

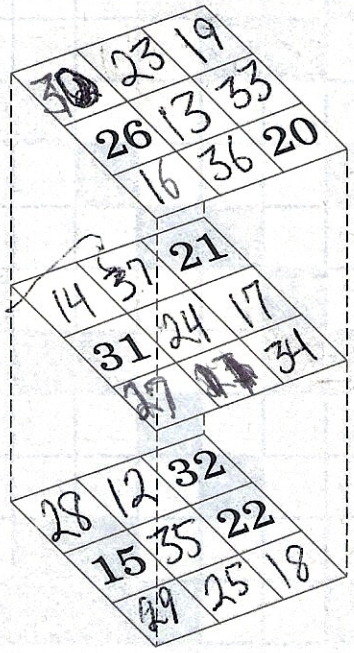
03570934	53617520
04728533	53968314
05463685	56174795
08658266	56270522
15169215	57250808
16756897	57703759
19523974	61560837
25692005	62506715
26352470	69705379
26516058	71795646
27381534	72581942
29572629	72857205
36150238	75805902
36692615	80654726
38539649	85261342
39503518	87527150
40635085	88361512
44059423	90683537
44581543	95645781
45957099	95816484
48592643	96058101
~~51369820~~	98214861
51746197	



THREE-LAYER MAGIC

In this puzzle, the magic number square has been taken to new heights — literally! The diagram consists of three layers of numbers stacked on top of each other, each layer consisting of nine squares. Using the numbers from 11 through 37 once each, place the numbers into the squares so that the three numbers in the following add up to the same "magic number": 1. each row of each layer; 2. each column of each layer; 3. each stack directly down through all three layers; 4. each diagonal that crosses through the center square of the diagram (which is the center square of the middle layer). Diagonals that do not run through the center square of the diagram (for example, the diagonals of the top or bottom layer) do NOT add up to the magic number. Some of the numbers have been entered as a starting point; can you deduce the magic number and finish the puzzle?

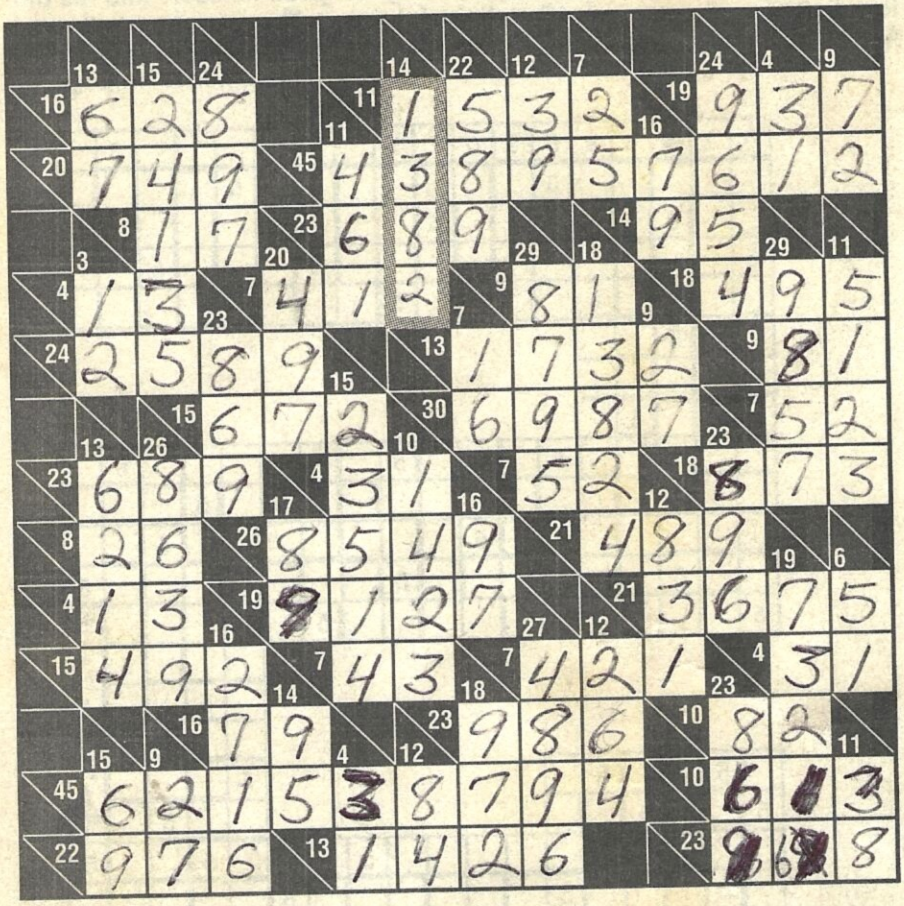
Solution is on page 88.



The magic number is 72.

CROSS SUMS

9.



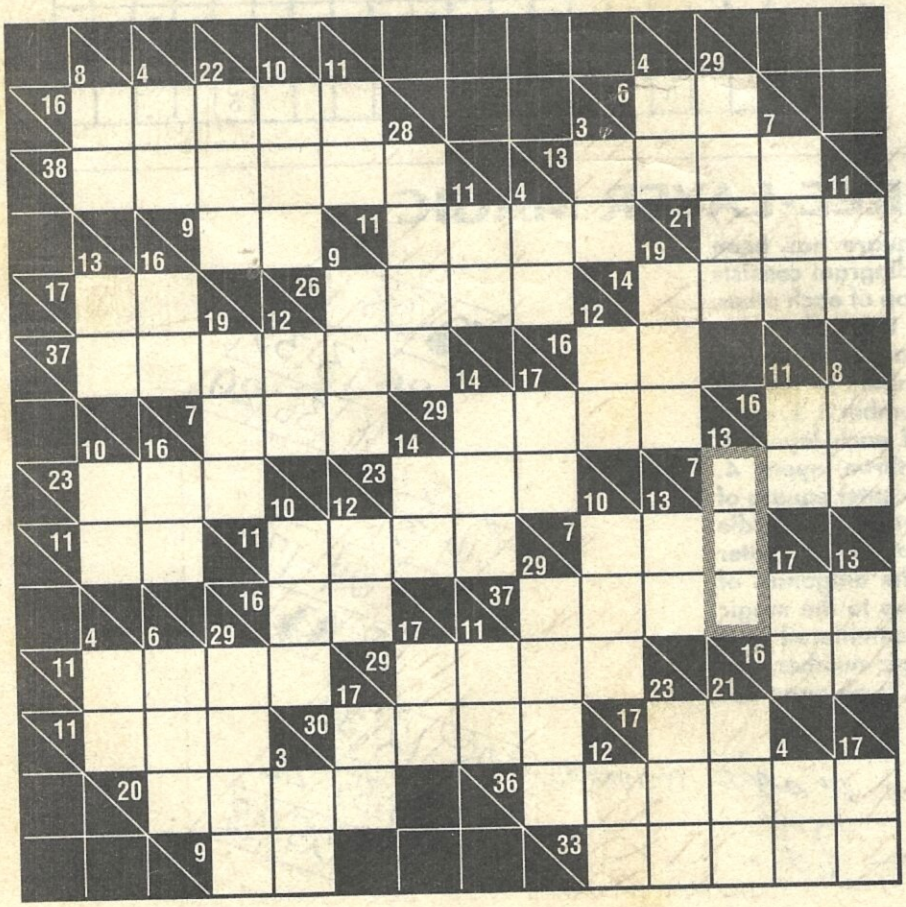
We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 87.

Directions for solving are on page 8.

When the Bullet Hits The Phone?

10.



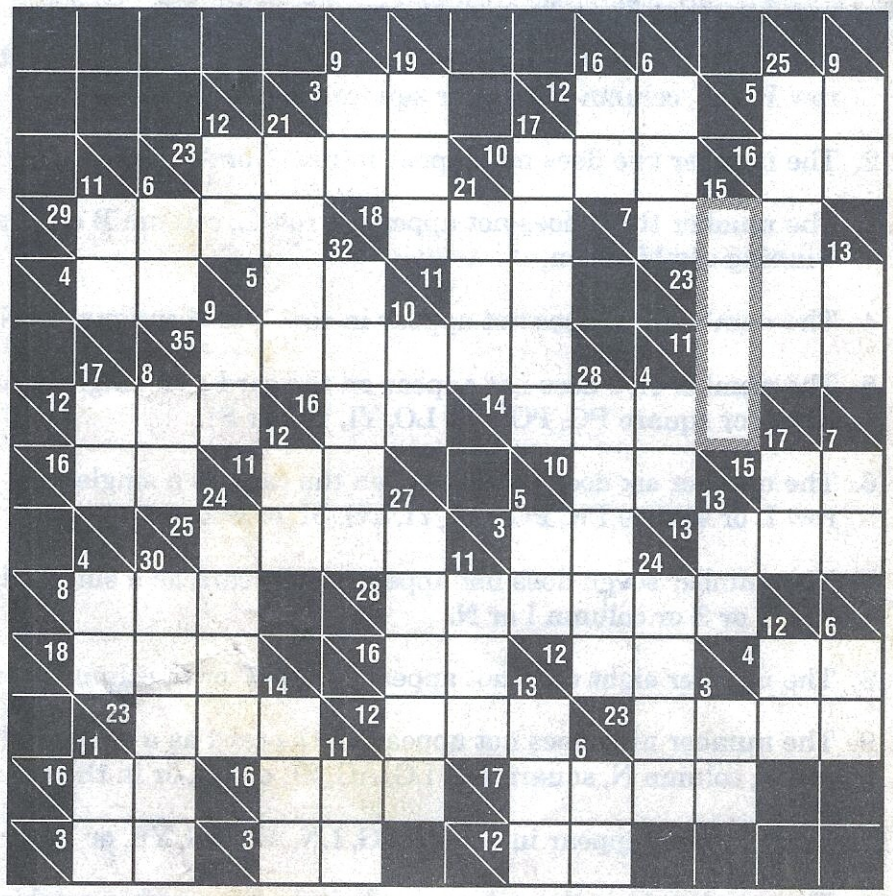
Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

11.

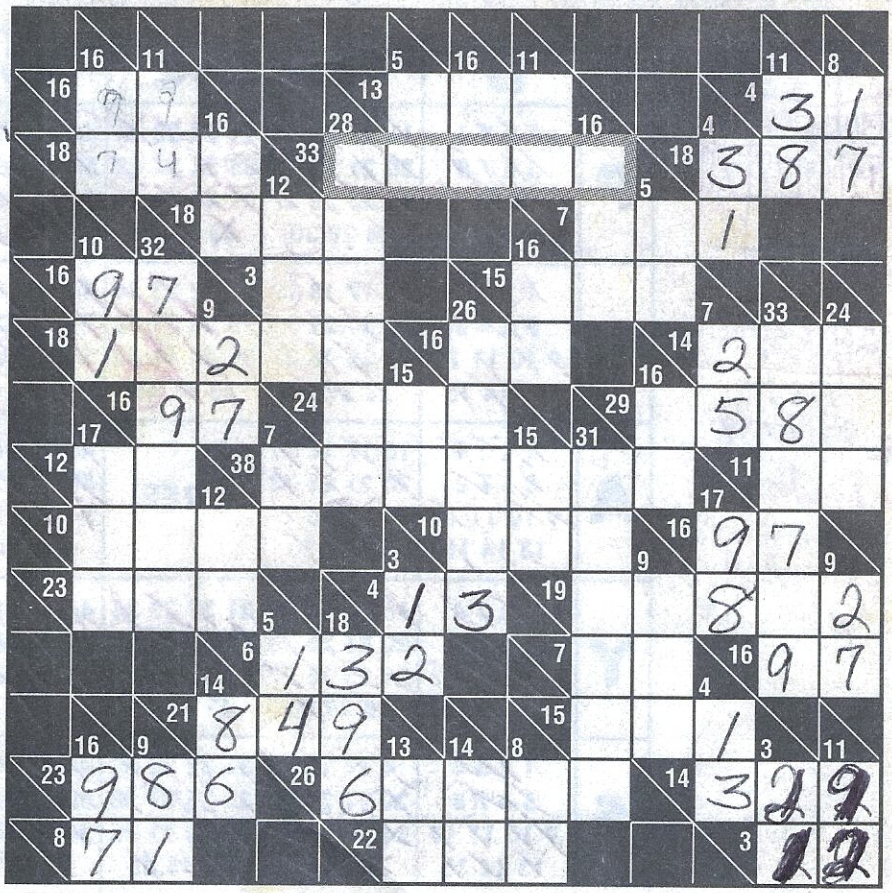
Solutions are on page 87.

5:00
Safety
meeting



12.

Very carefully!
And maybe in
front of the
other Britney!



BINGO PLAYS 3

Directions for solving Bingo Plays are on page 10.

Solution is on page 90.

1. The number one does not appear on the card as a single-digit number, nor does it appear in row P or S, column N or O, or square LB, YI, or YG.
2. The number two does not appear in row P or A, column N or G, or square LI, YB, YO, or SO.
3. The number three does not appear in row L, column B or O, square YG or SG, or in the winning combination.
4. The number four does not appear in row Y or S or square PN, AB, or AO.
5. The number five does not appear on the card as a single-digit number, nor does it appear in row A or square PG, PO, LG, LO, YI, YN, or SI.
6. The number six does not appear on the card as a single-digit number, nor does it appear in row L or square PN, PO, AO, YI, YG, SI, or SG.
7. The number seven does not appear on the card as a single-digit number, nor does it appear in row Y or S or column I or N.
8. The number eight does not appear in row P or L, column I, or square YG, SN, SG, or SO.
9. The number nine does not appear on the card as a single-digit number, nor does it appear in row Y, column N, square PG, LG, AG, SI, or SO, or in the winning combination.
10. Zero does not appear in square PG, LN, AB, AG, YB, or YI, or in the winning combination.
11. The number 11 is the only same-digit double-number combination on the card.

	B	I	N	G	O
P	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
L	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	FREE	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
Y	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
S	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

	B	I	N	G	O
P	4	30	35	46	74
L	2	19	45	47	72
A	11	16	X	48	70
Y	15	29	38	50	68
S	8	23	36	59	65

The winning combination is: 4 2 11 5 8

LOGIC PROBLEM 6

SNOW BUSINESS

by Diane Baldwin

On a cold day last November, as a giant storm front moved toward Gotham City, James and four other meteorologists at local radio stations (designated by their 4-letter identification codes) predicted the season's first snowfall. Each forecaster predicted a different day (Monday through Friday), and a different amount of snow (from 1 to 5 whole inches). As it turned out, one of the five, Bates, made an accurate prediction. From this information and the following clues, can you determine each forecaster's full name and affiliated radio station, as well as the day and amount of snow he or she predicted?

1. Beth's prediction was half the total of Stevens's and the station WEST meteorologist's guesses.
2. Harold predicted snow for the day before the WORD forecaster's guess and the day after the 3" prediction.
3. Ellis didn't make the prediction for Wednesday.
4. Adam, the woman who chose Tuesday, and the WHAM forecaster all predicted an odd number of inches.
5. The WAKE meteorologist chose the day after Mr. Becker and the day before the 5" prediction.
6. Both Mary and Keane predicted that an even number of inches would fall.
7. A man, who's not the WARM forecaster, made the Friday prediction, which was for more snow than the Thursday guess.

Solution is on page 93.
See page 6 for directions on how to use the solving chart.

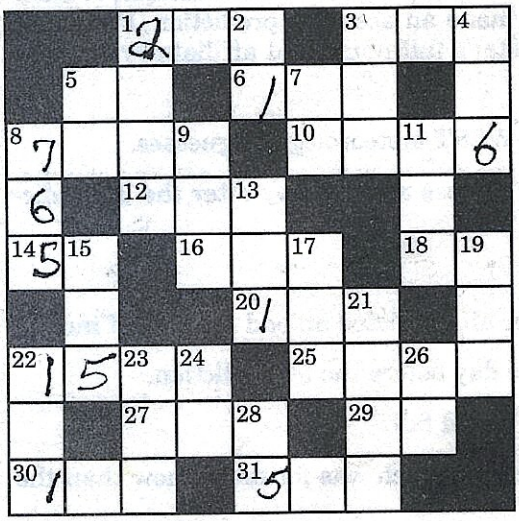
	Bates	Beck.	Ell.	Keane	Stev.	WAKE	WARM	WEST	WHAM	WORD	Mo.	Tue.	Wed.	Th.	Fr.	1"	2"	3"	4"	5"
Adam																				
Beth																				
Harold																				
James																				
Mary																				
1"																				
2"																				
3"																				
4"																				
5"																				
Mon.																				
Tue.																				
Wed.																				
Thu.																				
Fri.																				
WAKE																				
WARM																				
WEST																				
WHAM																				
WORD																				

FIGURE LOGIC 5 & 6

by Linda Thistle

Directions for solving Figure Logics are on page 5.

Starting helps are on page 98.

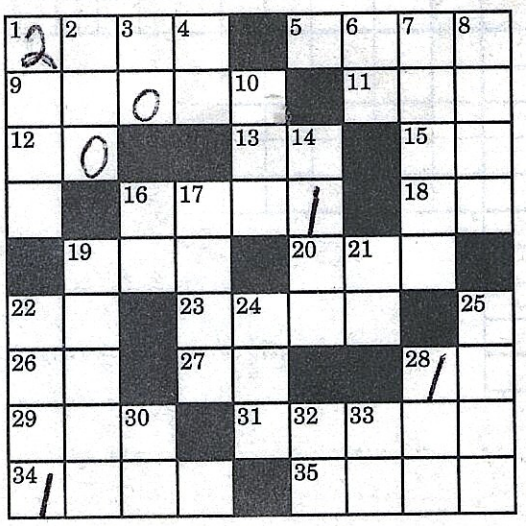


ACROSS

1. Three times 26-Down
3. One digit is the sum of the other digits
5. 2-Down minus 5-Down
6. 5-Down plus 28-Down
8. Six times 19-Down
10. Four times 30-Across
12. 4-Down plus 23-Down
14. 5-Down minus 7-Down
16. Four more than 1-Across
18. Six more than 14-Across
20. Eight times 14-Across
22. Two times 8-Down
25. Seven times 3-Across
27. The sum of the digits is 7-Down
29. Three times 7-Down
30. One digit is the sum of the other digits
31. Four times 20-Across

DOWN

1. 22-Across plus 31-Across
2. 18-Across plus 29-Across
3. 15-Down plus 17-Down
4. 31-Across minus 17-Down
5. Consecutive digits in descending order
7. Consecutive digits in descending order
8. One digit is the sum of the other digits
9. 1-Across plus 11-Down
11. One-fourth of 1-Down
13. 4-Down plus 15-Down
15. Three times 28-Down
17. 15-Down plus 22-Down
19. One digit is the sum of the other digits
21. 5-Across times 22-Down
22. One digit is the sum of the other digits
23. 8-Across minus 25-Across
24. Consecutive digits in ascending order
26. Five more than 5-Across
28. One-fifth of 30-Across



ACROSS

1. Two times 34-Across
5. The square of its first two digits is its last three digits
9. The square of its first two digits is its last four digits
11. Consecutive digits
12. Five times 28-Across
13. One digit is three times the other
15. Consecutive digits
16. Digits of 34-Across reversed
18. One-fourth of 27-Across
19. Digits of 24-Down rearranged
20. The product of its digits is 3-Down
22. A multiple of seven
23. Digits of 5-Across rearranged
26. Last digits of 1-Down
27. One less than 15-Across
28. Sum of the digits of 7-Down
29. 19-Across plus 22-Across
31. The square of its first two digits is its last four digits
34. The square of its first two digits is its last three digits
35. Its last two digits equals the sum of its first two digits

DOWN

1. The square of its first two digits is its last three digits
2. Six times 3-Down
3. 18-Across plus 4-Down
4. 13-Across plus 16-Down
6. Last digits of 14-Down, reversed
7. 9-Across minus 19-Down
8. Its first digit is the sum of its last three digits
10. Digits of 28-Down rearranged
14. One-third of 8-Down
16. Sum of the digits of 25-Down
17. Digits of 1-Across rearranged
19. The square of its first two digits is its last four digits
21. Consecutive digits
22. Its second digit is the sum of its other three digits
24. Two times 11-Across
25. 16-Across plus 23-Across
28. One-third of 29-Across
30. 26-Across minus 27-Across
32. 22-Across plus 16-Down
33. One digit is three times the other

Solutions are on page 89

NUMBER PLACE

See page 20 for solving directions.

Solutions are on page 90.

10.

	2				9	4		8
9	5	4	1					
				5	2	1	7	
6			2	3		8		
4				9	1		2	
2	7					9	1	
	9	6	5					2
		2	6	1				
		7			8		6	1

11.

	5			2	9	7		
			7		5		8	6
4	2	7						5
	1					4		3
		9		1	3	8		
5	3		6				2	
			4	6				2
3		1	8				9	
2						5	1	

12.

						1	6	3
6		1		7	8			2
2	3		9		6			
	1	9				7	2	
		6	7	8	9			
4				6		9	5	
7	9		8			6		
	6	8	5					9
				9	1		7	4

13.

		7	6	2				3
3	1		7				4	
		8	3			9		2
1	8				7	2		
	2				6	7		8
6				8	9	4		
2	5						9	
			8	1			5	4
		6		7	5		2	

14.

	9		7	5	6			
7		4		9			5	
8						6	9	7
	4					7		2
9		8		2		1		
			8	6	7	5		
			9		1		7	5
4	3	7						
	5		4				6	8

15.

		5	8	3		2		
9	4	8				3		
			1	4			9	
			4	6				3
4					3	5	8	
6	8	3					2	
	7	4		8		1		
			2		7		6	9
5	9				4			2

16.

	2	5	3					
	9		7	5				8
		4	9				6	3
1	3						7	2
4					3	1		
		7		4	8	6		
		6			2	8	5	
8	4		5					
5				6		7	2	

17.

	2		9	7				1
		3	4	1			2	
6						7	5	
1	6	9			8			
4				2	9	8		
				3		9	4	6
	8				7	1		
		5	8		4			
	9	4					8	2

18.

	1		9		8		3	
					1	5	9	2
9	3	7	2					
7			3	8			1	
	6	9	4			3		
1				6		2	8	
	9	4		2	3			7
6		8			4			3
				9		4		8

Collector's Series Number Place *is here! Over 150 of your favorites. See page 21 to order.*

LOGIC PROBLEM 7

BAGGY BEANIES

by Lydian Davis

When Bob had saved up $50 from his allowance and various chores, he spent the entire amount on the last five Beanies (two of which are Dale the Horse and Barbara the Barnacle) that he needed to complete his collection of Baggy Beanies. He found each Beanie rarity in a different store (one was Henry's Department Store) and each cost a different number of whole dollars. Two of the Beanies are green (lime and mint), two are orange (nectarine and peach), and one is lemon yellow. From this information and the following clues, can you determine each Baggy Beanie's color, the store where Bob found it, and its price?

1. All of the Beanies cost more than the recommended price of $5; in fact, the most expensive one was three times this price.
2. Clyde the Horse cost more than the lemon Beanie.
3. Bob didn't find the mint Beanie at Ingrid's Card Shop.
4. Bob found the lemon Beanie, the second-lowest-priced Beanie, and the one at Gilroy's Toys (which wasn't the nectarine Beanie) all in one day. He found Evelyn the Elephant and the one at Fred's Kids' Shop (which wasn't Clyde) three days later.
5. One horse cost twice as much as the other horse.
6. Both of the orange Baggy Beanies cost more than both of the green ones.
7. Angel the Fish cost the same as the combined cost of the lime Beanie and the one from Jeff's Gifts. Each of these prices was a multiple of three.

Solution is on page 94.

See page 6 for directions on how to use the solving chart.

	lemon	lime	mint	nect.	peach	Fred's	Gilroy's	Henry's	Ingrid's	Jeff's	price				
Angel															
Barbara															
Clyde															
Dale															
Evelyn															
price															
Fred's															
Gilroy's															
Henry's															
Ingrid's															
Jeff's															

WORD ARITHMETIC

See page 15 for solving directions.

Answers are on page 98.

19.

0 1 2 3 4 5 6 7 8 9

```
          ONE
RAN | TRACES
      TACS
       BCZE
      TOAE
        BNCS
      BORT
         BE
```

20. AMUSEDGIRL

0 1 2 3 4 5 6 7 8 9

```
          524
          DUE
1794 | 940345
MILE | LEASED
     8970
     RLIA
      4334
      ESSE
      3588
      SDRR
       7465
       IEGD
       7176
       IMIG
        289
        URL
```

21. BLUSTERING

0 1 2 3 4 5 6 7 8 9

```
          478
          TIN
670 | 320415
RIB | SUBTLE
    2680
    URNB
     5241
     EUTL
     4690
     TRGB
      5515
      EELE
      5360
      ESRB
       155
       LEE
```

22. AN_____K

0 1 2 3 4 5 6 7 8 9

```
          NUT
DUN | COURT
      DUN
       LTRR
      LOKU
        ORKT
       OLTT
         LDA
```

23.

0 1 2 3 4 5 6 7 8 9

```
          CAN
CON | DEMAND
      NUIM
       NAAN
      NNUU
        ECAD
       EEAA
         DSS
```

24.

0 1 2 3 4 5 6 7 8 9

```
          HIE
SEW | UNITES
      UGSI
       HTHE
      GSGH
        SOHS
       HNOU
         HGG
```

25.

0 1 2 3 4 5 6 7 8 9

```
          SO
STUN | BRASH
      TNHB
       USHBH
      USRKR
         SAH
```

26.

0 1 2 3 4 5 6 7 8 9

```
          OR
AURA | VOCALS
      VACAU
       ISSOS
      ISHUA
         OSL
```

27.

0 1 2 3 4 5 6 7 8 9

```
          AN
OIL | HANDY
      HDNF
       UFDY
      YHF
         UOY
```

LOGIC PROBLEM 8

by Kevyn Dymond

THE NEW COUNCIL MEMBERS

The townspeople of Metropa recently elected five new council members, including Dale and Henry. Each has a different regular day job, lives in a different suburb, and represents a different section of Metropa (one represents the north district). From this information and the clues below, can you determine each council member's full name (one last name is O'Shea), day job (one is a teacher), district represented, and suburb of residence?

1. The five council members are: Mary, Ms. Ingram, the green-eyed farmer, the east district representative, and the blue-eyed resident of Jamesboro.
2. Council member Unger (who isn't the accountant) is not the south district representative (who doesn't live in Valleyview).
3. Neither the accountant nor the realtor has brown eyes; one of these two is the man who lives in Youngdale.
4. Pat and council member Quinn are, in some order, the baker and the Lakeside resident.
5. Ms. Zimms doesn't have green eyes.
6. The realtor is either the west district representative, the Kingston resident, or both.
7. Chris and the member for the downtown district both have brown eyes.

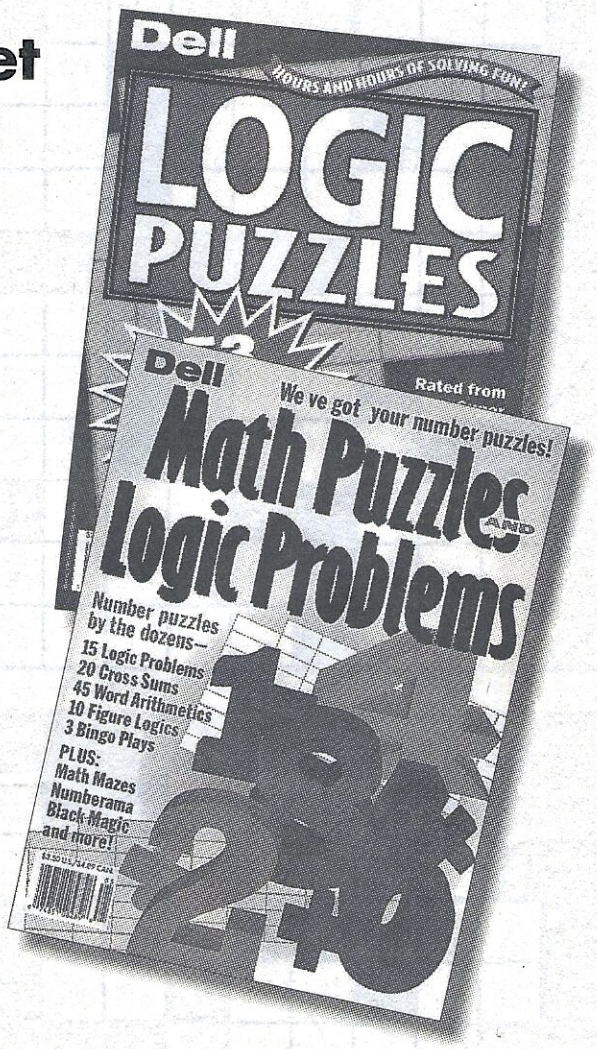
Solution is on page 94.

See page 6 for directions on how to use the solving chart.

	Ing.	O'Shea	Quinn	Ung.	Zimms	acct.	bak.	farm.	real.	teach.	down.	east.	nor.	sou.	west	James.	King.	Lake.	Vall.	Young.
Chris																				
Dale																				
Henry																				
Mary																				
Pat																				
James.																				
King.																				
Lake.																				
Vall.																				
Young.																				
down.																				
east.																				
north																				
south																				
west																				
acct.																				
baker																				
farmer																				
realtor																				
teacher																				

Logic Lovers, Don't Miss Out!

Subscribe today and get your favorite Dell Logic Magazines delivered right to your door.



Dell Logic Puzzles guarantees you hours of solving fun. Every issue brings you 66 pages packed with easy to super challenging logics. Six big issues, $15.97.

Dell Math Puzzles and Logic Problems offers you the best of two worlds, Dell Logic Problems *and* your favorite math puzzles! You get Cross Sums, Figure Logics, Word Arithmetics and more! Home delivery six times a year, all JUMBO 98 page issues, $19.97.

Subscribe today!

Mail to: **Dell Logic Puzzles**
PO Box 54360, Boulder, CO 80322

☑ **Yes!** Enter my subscription(s) as indicated below.

❑ **Dell Logic Puzzles** (DLGC) 1 year (6 issues) $15.97

❑ **Dell Math Puzzles and Logic Problems** (DMLP) 1 year (6 issues) $19.97

❑ My payment is enclosed (U.S. funds) ❑ Bill me

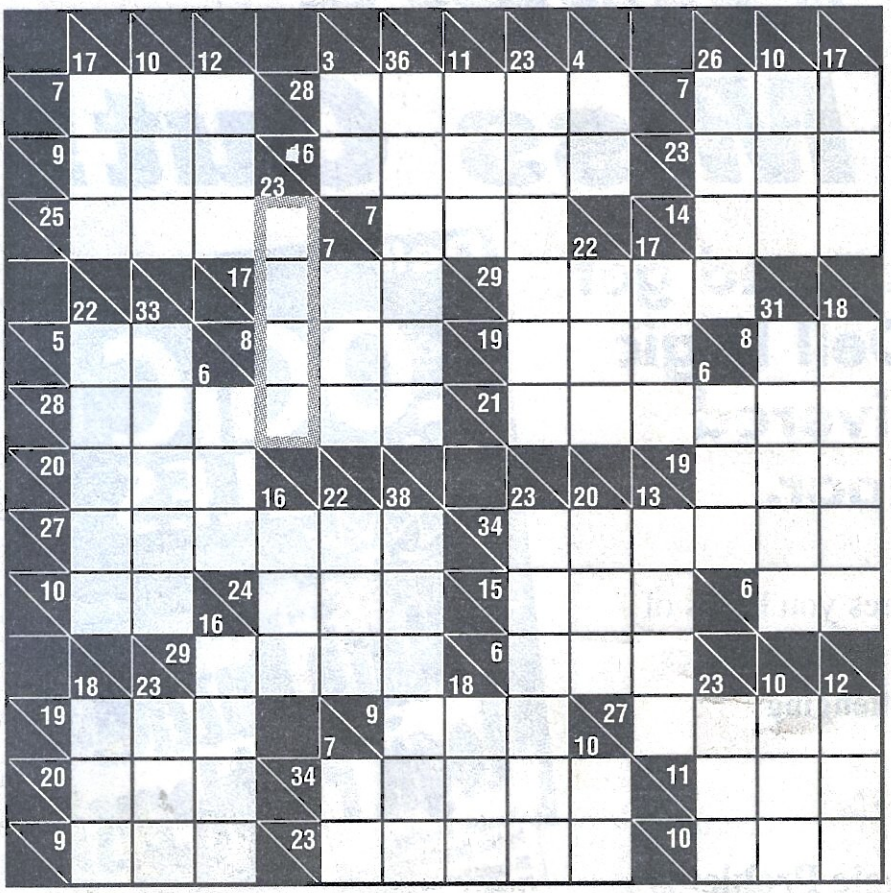
Name_____
(Please Print)

Address_____ Apt._____

City_____ State_____ ZIP_____

Please allow 6 to 8 weeks for delivery of first issue. Canadian and foreign orders add $5 per year (U.S. funds). Offer expires 12/31/02. 5P17

CROSS SUMS

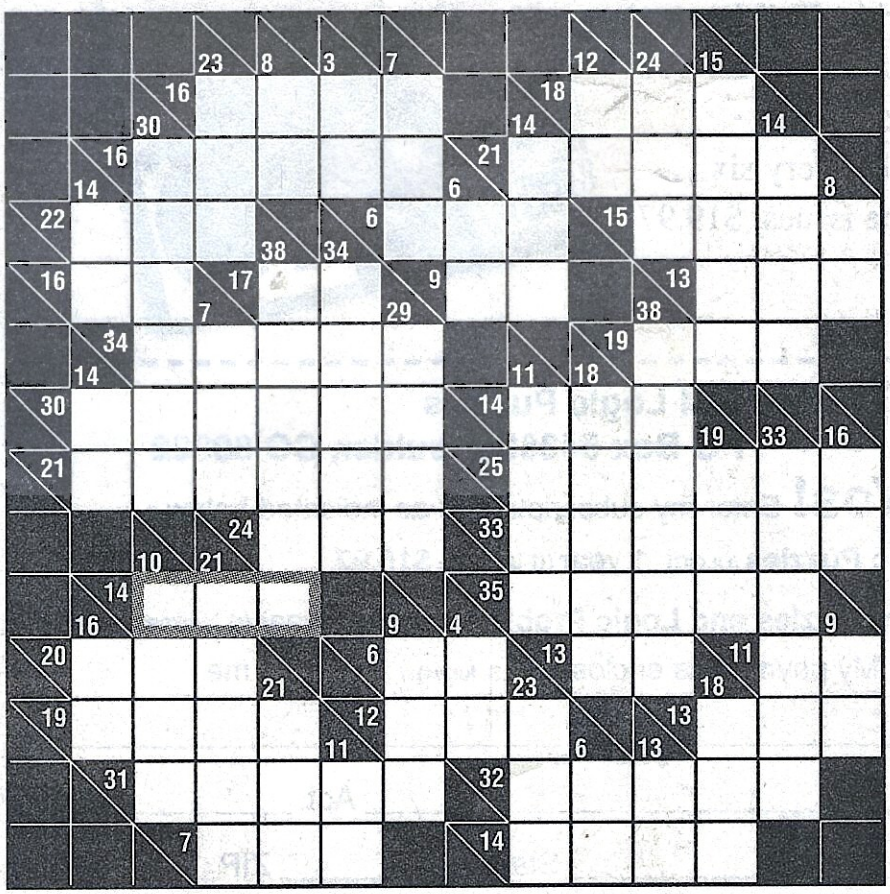


13.

We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 87.

Directions for solving are on page 8.



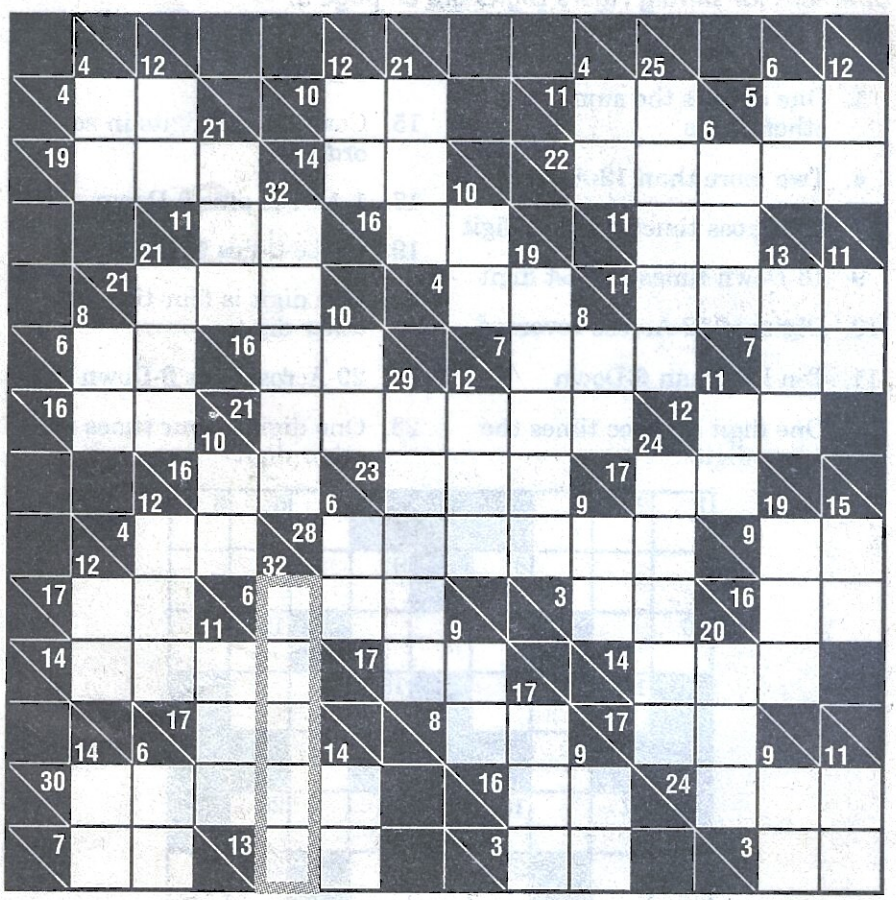
14.

Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

15.

Solutions are on page 87.



16.

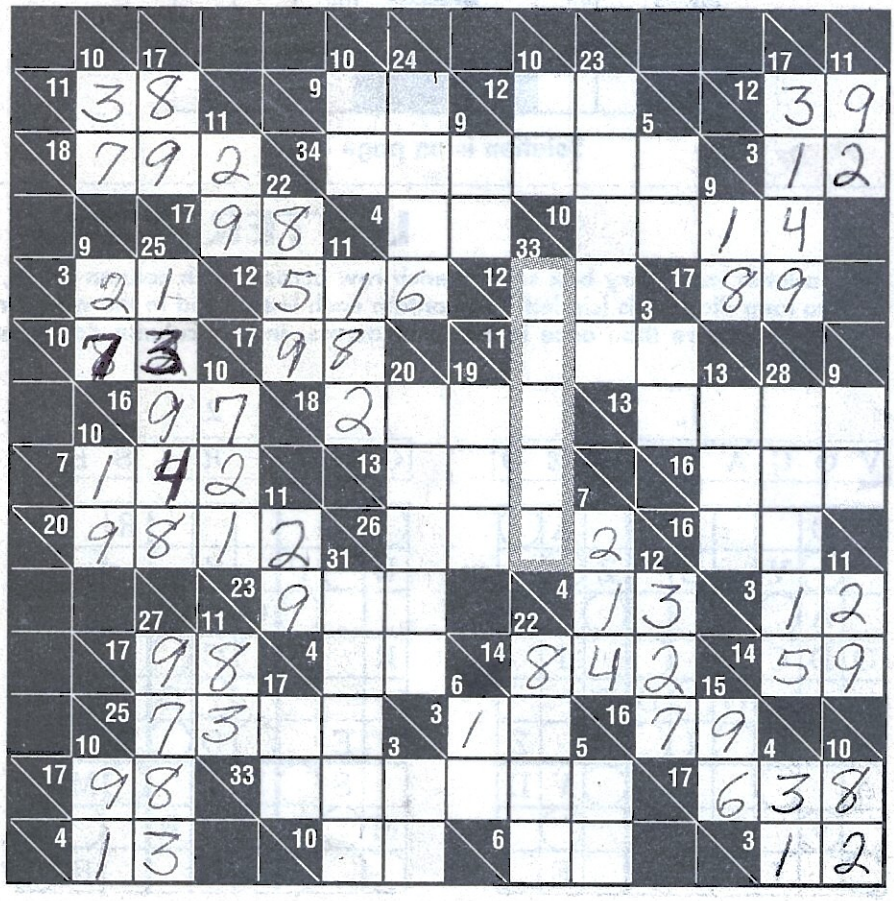


FIGURE LOGIC 7

by Linda Thistle

Directions for solving Figure Logics are on page 5.

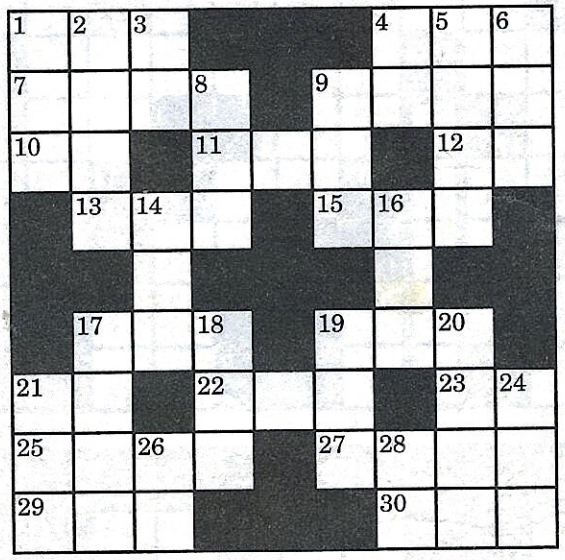
Starting help is on page 98.

ACROSS

1. One digit is the sum of the other digits
4. Two more than 13-Across
7. 22-Across times its first digit
9. 16-Down times its last digit
10. Digits of 12-Across reversed
11. Ten less than 6-Down
12. One digit is three times the other digit
13. Two hundred less than 9-Down
15. Consecutive digits in some order
17. 1-Across plus 9-Down
19. Three times 13-Across
21. One digit is four times the other digit
22. 29-Across plus 3-Down
23. One digit is four times the other digit
25. 14-Down times its last digit
27. 11-Across times its first digit
29. Four less than 17-Across
30. One-third of 29-Across

DOWN

1. 17-Across minus 15-Across
2. Sum of the digits is 4-Down
3. Six more than 23-Across
4. Digits of 26-Down reversed
5. Sum of the digits is 23-Across
6. Digits of 4-Across rearranged
8. Different odd digits
9. Same digit repeated
14. Four less than 19-Down
16. Ten more than 19-Across
17. Sum of the digits is 3-Down
18. 6-Down plus 26-Down
19. Thirty less than 15-Across
20. Sum of the digits is 12-Across
21. Different even digits
24. Digits of 18-Down rearranged
26. Nine more than 28-Down
28. Four times 12-Across



Solution is on page 89

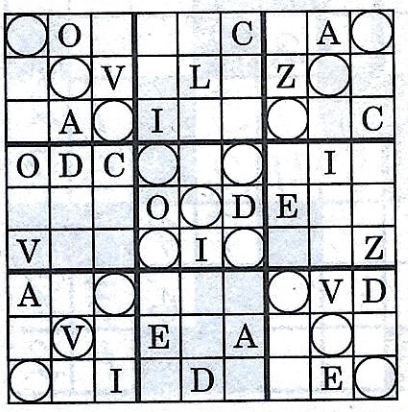
LETTER PLACE

Place a letter into every box so that each row across, each column down, each small 9-box square, and each of the two long diagonals (circled) will contain each letter used in the word or phrase above each diagram. No letter may appear more than once in any row across, in any column down, on either diagonal, or within any small 9-box square.

Solutions are on page 89.

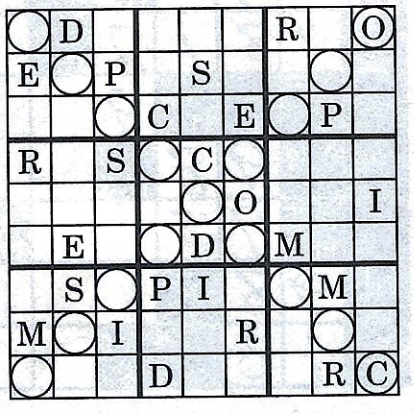
1.

V O C A L I Z E D



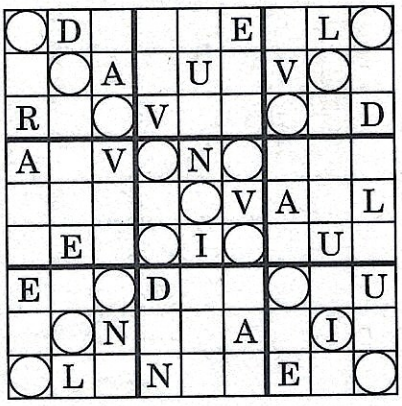
2.

C O M P R I S E D



3.

U N R I V A L E D



LOST SUMS

In each case, what you see below was once an addition problem that contained each of the digits 1-9. Now, however, all but one of its digits have been lost, and it is up to you to recreate the original problem by filling in the dashes. To aid your reconstruction, the sum of the digits in each line is given in parentheses next to that line. Remember, each digit can be used only once, so cross off each number once you've used it.

Answers are on page 97.

A.

__ __ __ __ (20)

8 __ __ (16)

\+ __ __ (9)

6 8 0 4

1 2 3 4 5 6 7 8 9

B.

__ __ __ __ (14)

__ __ __ (20)

\+ 8 __ (11)

7 1 5 5

1 2 3 4 5 6 7 8 9

BLACK MAGIC

Blacken in exactly ten of the empty squares in each grid below in such a way that each numbered square accurately indicates how many immediately adjacent squares are black. For example, a square containing "3" indicates that three and only three of the adjacent squares, moving horizontally, vertically, or diagonally, are black. It may be helpful to mark any square that you decide is not black with "0."

Solutions are on page 90.

1.

	3					
			3			
	1					2
					3	
		2		2	1	
		3				
1						1

2.

						1
1		2				
	3			2		2
	2		3			
		1		3	3	
1		3		1		
			1			1

BY THE NUMBERS

Each letter in a By the Numbers puzzle represents a digit from 0 to 9. In each individual puzzle, every time a specific letter is used, it stands for the same digit. When a digit already appears in a puzzle, none of the letters in that puzzle will represent that same digit. Thus, none of the letters in the first puzzle can stand for 2, 4, 6, 8, or 9.

Answers are on page 97.

1.

A B, 2 C 8 A = _____

\+ B 2, A A 6 B = _____

C 2 9, B B 4 C = _____

2.

D, E F E D = _____

F, 7 D D E = _____

\+ F E 7 F = _____

7, 5 0 D

SQUARE LOGIC 1

by Linda Thistle

Each letter in the diagram below stands for a number from 1 through 25. Using the seven clues, can you deduce the number represented by each letter? As you can read in clue 2, when all the numbers have been correctly entered into the diagram, it will be a magic number square. As each number from 1 through 25 is used only once (see clue 1), you will find it helpful to cross out each number as you place it in the diagram. **Solution is on page 88.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

CLUES

1. Only the whole numbers from 1 to 25 are used. Each number is used only once, and all twenty-five numbers are used.

2. The five numbers in each row across, each column down, and each of the two diagonals add up to 65.

3. The four corner squares, A, E, U, Y, and the center square, M, also add up to 65.

4. The squares B, J, M, P, and X contain numbers greater than 20.

5. F, S, N, and C contain consecutive odd numbers in ascending order.

6. K is one-half of E, one-third of G, one-fourth of R, and one-fifth of X.

7. W is one-half of T, one-third of I, and one-fourth of B.

A 16	B 24	C 13	D 2	E 10
F 7	G 15	H 4	I 18	J 21
K 5	L 8	M 22	N 11	O 19
P 23	Q 1	R 20	S 9	T 12
U 14	V 17	W 6	X 25	Y 3

LOGIC PROBLEM 9

MAD ABOUT PLAID

by Jean M. Hannagan

Rachel and four of her friends persuaded their moms to take them shopping for new clothes. Plaid was the latest fad, so each bought a different item made of plaid (one got a hat). Each (including the Peterson girl) chose a plaid featuring three of the following colors: red, yellow, green, blue, and purple. No two plaids used the same combination of colors. From this information and the following clues, can you determine each girl's full name, as well as the plaid item she purchased and its three colors?

1. Only one plaid combined purple and red. Darla's plaid contained purple; Perkins didn't choose one with red.
2. Powers didn't pick a plaid containing yellow; her garment had one color in common with the vest.
3. Neither the girl who bought the skirt nor Sandra (who isn't Payne) picked a plaid containing blue.
4. Vanessa (who isn't Parker) never wears yellow; the vest didn't contain green.
5. Mallory, who didn't pick a red plaid, didn't buy the pants.
6. Parker didn't choose green; Darla didn't choose red. Mallory isn't the Perkins girl.
7. The plaid jacket didn't contain yellow. No plaid pattern used purple and yellow together.
8. Only two of the girls chose plaids containing both blue and green.

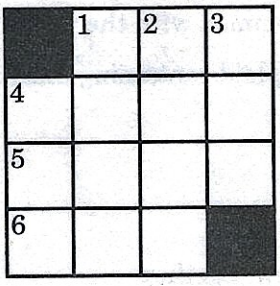
Solution is on page 94.

See page 6 for directions on how to use the solving chart. NOTE: Since each girl bought an item containing three of the five possible colors, you will not be able to enter a definite "no" in the boxes of each row and column once you enter a definite "yes."

	Parker	Payne	Perkins	Peterson	Powers	hat	jacket	pants	skirt	vest	blue	grn.	purp.	red	yell.
Darla															
Mallory															
Rachel															
Sandra															
Vanessa															
blue															
green															
purple															
red															
yellow															
hat															
jacket															
pants															
skirt															
vest															

GO FIGURE!

In Go Figure!, use the ACROSS and DOWN clues to determine which of the digits 1 through 9 belongs in each square in the diagram. Digits may be repeated within a number, and no zeros are used. Solution is on page 88.



ACROSS

1. This is two more than a perfect square between 200 and 300. (Note: A perfect square is the product of a number multiplied by itself; 16 is a perfect square because 4 x 4 = 16.)
4. This is four consecutive digits in some order.
5. This is four odd digits.
6. The product of this number's second and third digits is a two-digit number whose second digit is the same as this number's first digit.

DOWN

1. The product of this number's first and second digits is a two-digit number. The second digit of that product is the same as this number's fourth digit; the first digit of that product is the same as this number's third digit.
2. This is four consecutive odd digits in descending order.
3. This number's third digit is the sum of its first and second digits.
4. This number's third digit is the sum of its first and second digits.

SUM LOGIC

The object here is to place the numbers surrounding the diagram into its empty boxes in such a way that the five numbers in each row, each column, and each of the two diagonals add up to the same total. The total for puzzle 1 is 90, and the total for puzzle 2, which uses negative numbers, is 36. Numbers cannot be repeated within a row, column, or diagonal. HANDICAP: Each number must be placed in one of the boxes of the row or column outside of which it now appears.

Solutions are on page 88.

1.

	17	3	1	8	46	
6				2		33
23	5					15
7			14			48
21					28	23
34		39				6
	1	4	46	17	3	

2.

	7	-41	42	5	-11	
-1				4		40
13	-4					21
44			15			13
21					41	-3
2		-1				-12
	32	17	-39	-30	5	

WORD ARITHMETIC

See page 15 for solving directions.

0-2-it?

Answers are on page 98.

28.

0 1 2 3 4 5 6 7 8 9

```
        TOO
  DOOR | CREATED
       CCTTR
        TCDIE
       CNDIF
        TFFED
       CNDIF
          CID
```

29.

0 1 2 3 4 5 6 7 8 9

```
                95
          UPON | TOPPING
                82
               NVETV
              585  8
               INIPN
              4452O
               GGIVD
              30   84
               UDTNG
                O   O
               UDNDU
                   77
                   OOV
```

30.

0 1 2 3 4 5 6 7 8 9

```
          ATE
  RIM | PARROT
       PRIA
        POLO
       PIIT
        OBLT
       OAIE
        MBA
```

31.

0 1 2 3 4 5 6 7 8 9

```
          CAT
  ADZ | TIDIED
       TAEC
        TSSE
       SDEE
        SROD
         DDA
         RSC
```

32.

0 1 2 3 4 5 6 7 8 9

```
          PET
 HUBS | SHUTOUT
       SKPTE
        KCBEU
       COECE
        KSUHT
       KTTKB
         SET
```

33. WHITECORDS

0 1 2 3 4 5 6 7 8 9

```
                348
              6749 | 2357247
  ORES | ITCHIER
         20247
        IWIER
       32654
        TIOCE
       26996
        IOSSO
       56587
        COCDR
       53992
        CTSSI
       2595
         ICSC
```

34.

0 1 2 3 4 5 6 7 8 9

```
          OR
  RILE | PLUCK
       RILE
        OURKK
       OYKCK
        OCOY
```

35.

0 1 2 3 4 5 6 7 8 9

```
          TAU
  ERE | SHORT
       SFT
         HWR
       TUA
         RTT
       OWU
         EAE
```

36.

0 1 2 3 4 5 6 7 8 9

```
          ED
  RULE | SPIRE
       PLDL
        URULE
       UCPRC
        UVEE
```

ADD-IT

In each puzzle below, place the numbers 1 through 12 (using each only once) into the appropriate boxes to arrive at the totals given for each row across, each column down, and for the two diagonal rows (because of the black box, some will involve adding four numbers and some will involve adding five). It's a good idea to cross off each number as you enter it, since you will use it only once for each of the diagrams. **Solutions are on page 89.**

1 2 3 4 5 6 7 8 9 10 11 12

1.

	9	5			= 31
10				1	= 37
2		■		3	= 19
	12	4	8		= 30
11			7	6	= 39
=	=	=	=	=	= 35
36	51	17	39	13	

1 2 3 4 5 6 7 8 9 10 11 12

2.

5	1	7			= 18
		2	10		= 40
6	11	■		12	= 35
			8	3	= 25
	9		4		= 38
=	=	=	=	=	= 24
41	29	23	30	33	

NUMBERAMA

Can you discover the logical pattern for each number sequence below and thereby discover the missing number (shown by the dash)? **Answers are on page 97.**

For example, for: 26 16 20 11 ___ 7 11 4 8, the solution is:
26(-10)=16(+4)=20(-9)=11(+4)=15(-8)=7(+4)=11(-7)=4(+4)=8.

A.	7	21	63	36	___	27	81	54	27	
B.	36	6	12	24	___	7	13	25	43	
C.	28	15	2	8	___	20	8	24	72	
D.	4	16	8	4	___	11	6	36	26	20
E.	14	2	16	8	___	3	18	9	36	
F.	33	44	22	34	___	28	14	26	13	
G.	52	26	13	52	___	15	45	21	10	20
H.	6	3	1	4	___	18	6	24	56	
I.	8	20	10	5	___	6	2	16	4	1
J.	2	16	8	4	___	18	9	3	1	

Mercedes "Show Me The Way" Russian Rubles! P.L. Records Director: Carrie Nielsen

LOGIC PROBLEM 10

PET PARADE

by Todd Rew

During the Pleasantville annual dog show, five lucky canines made it to the final round. Each dog was a unique breed (one was a collie), and each took a solo turn being paraded in front of the judges. At the conclusion of the round, the judges awarded a prize (from 1st through 5th Prize) to each dog. From this information and the following clues, can you determine each dog's name and breed, as well as the order in which it was seen by the judges and the prize it won?

1. Titus and the boxer were both seen by the judges sometime after the dog that won 4th Prize.
2. The five dogs were, in some order: the first dog shown, the poodle, the 1st and 2nd Prize winners, and Blue.
3. Either the Irish setter (which won 3rd Prize) or Rover was shown second.
4. Butch received a higher prize than Sparky.
5. The poodle was the third dog the judges saw.
6. The beagle's prize number was the same as its presentation order number; one other dog also had the same prize and turn number.

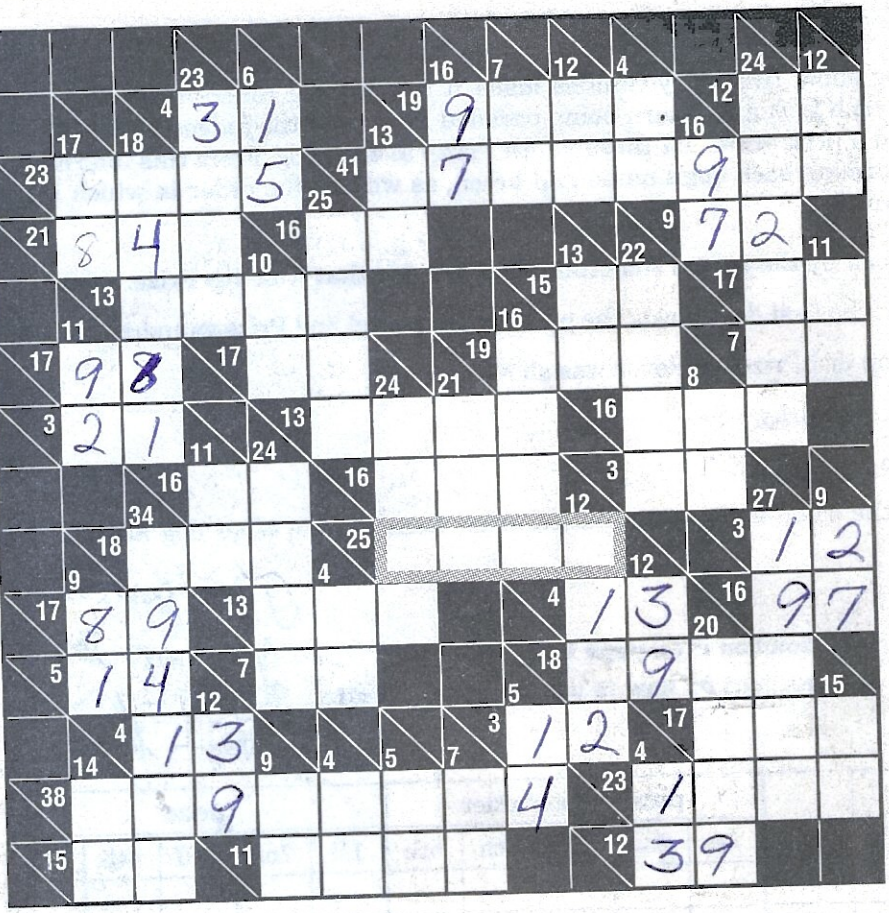
This just in: We have to pay $275 — in money — to Vegas!

Solution is on page 94.
See page 6 for directions on how to use the solving chart.

		beagle	boxer	collie	poodle	setter	presentation order 1st	2nd	3rd	4th	5th	prize 1st	2nd	3rd	4th	5th
Blue																
Butch																
Rover																
Sparky																
Titus																
prize	1st															
	2nd															
	3rd															
	4th															
	5th															
pres. order	1st															
	2nd															
	3rd															
	4th															
	5th															

CROSS SUMS

17.

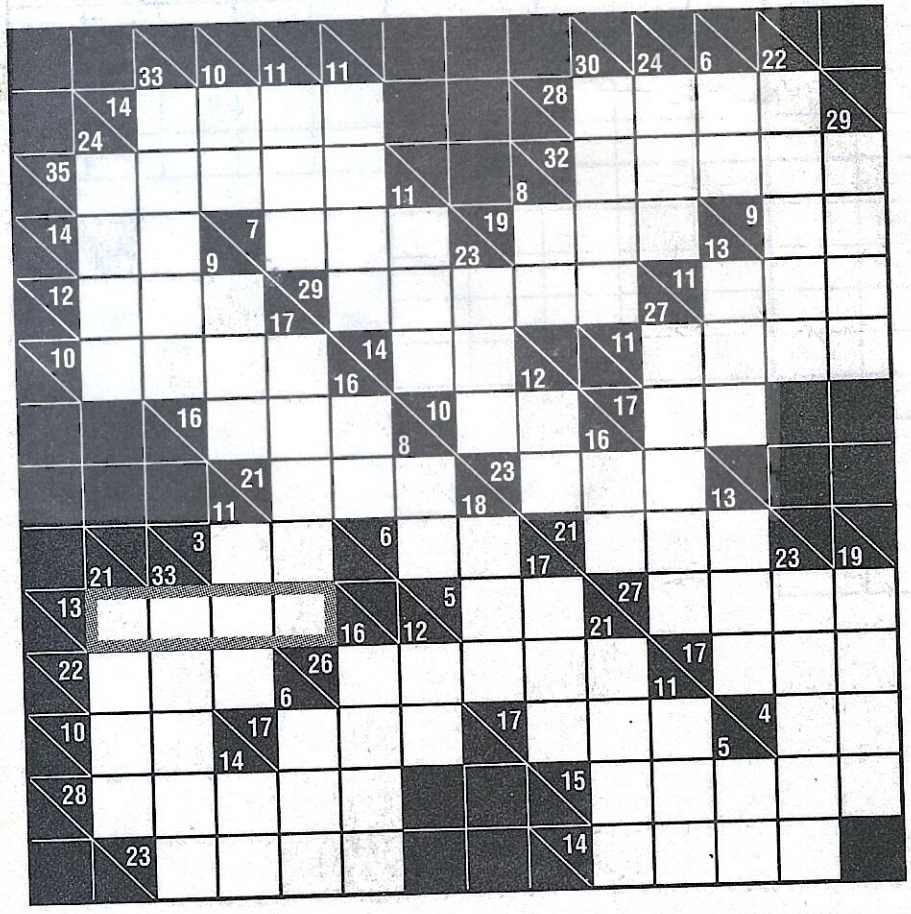


We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 87.

Directions for solving are on page 8.

18.

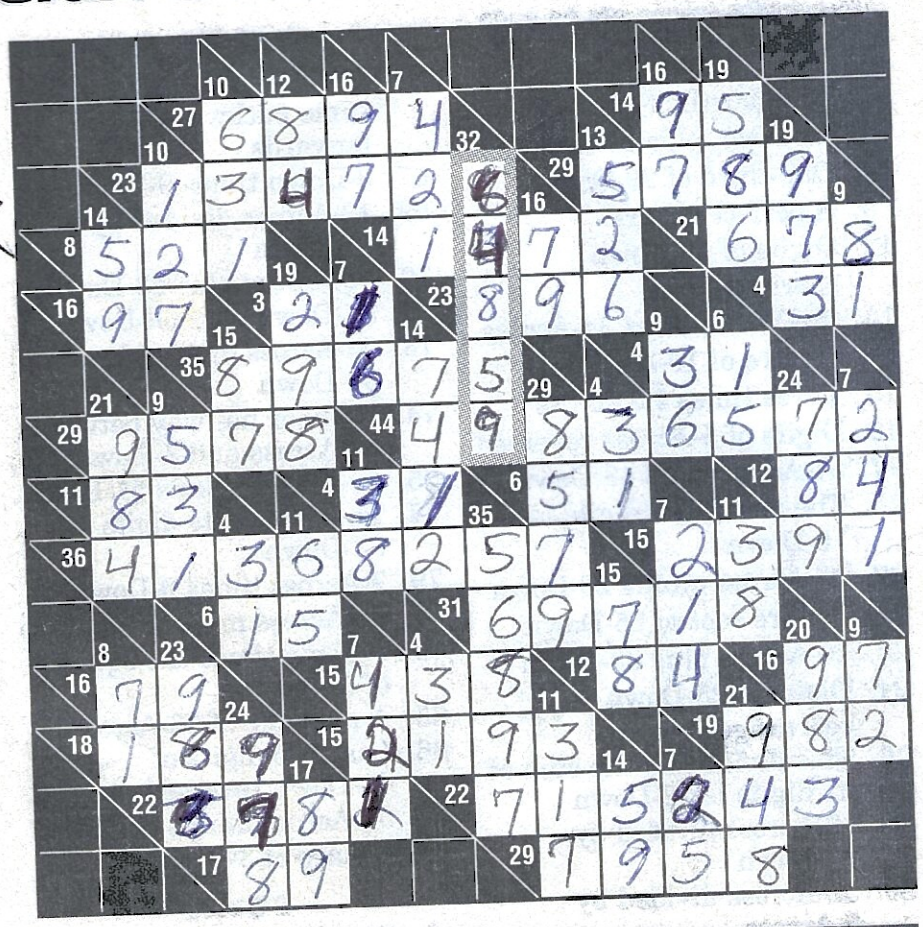


Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

19.

Solutions are on page 87.



20.

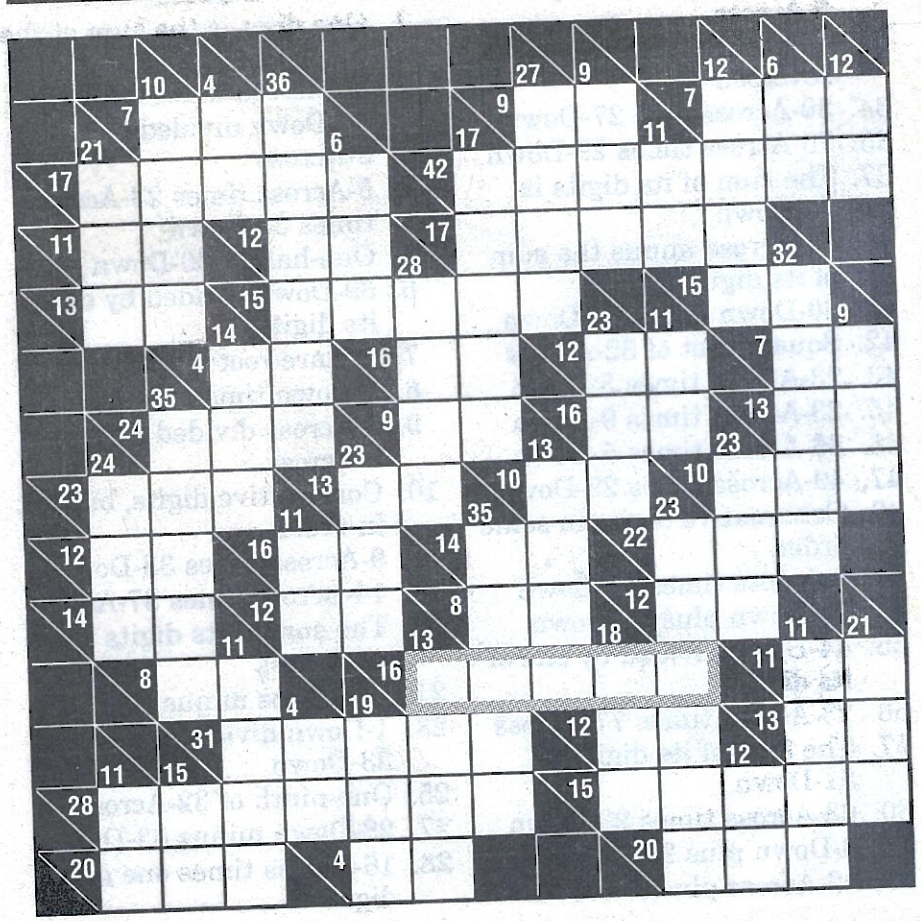


FIGURE LOGIC 8

by Evelyn B. Rosenthal

Directions for solving are on page 5.

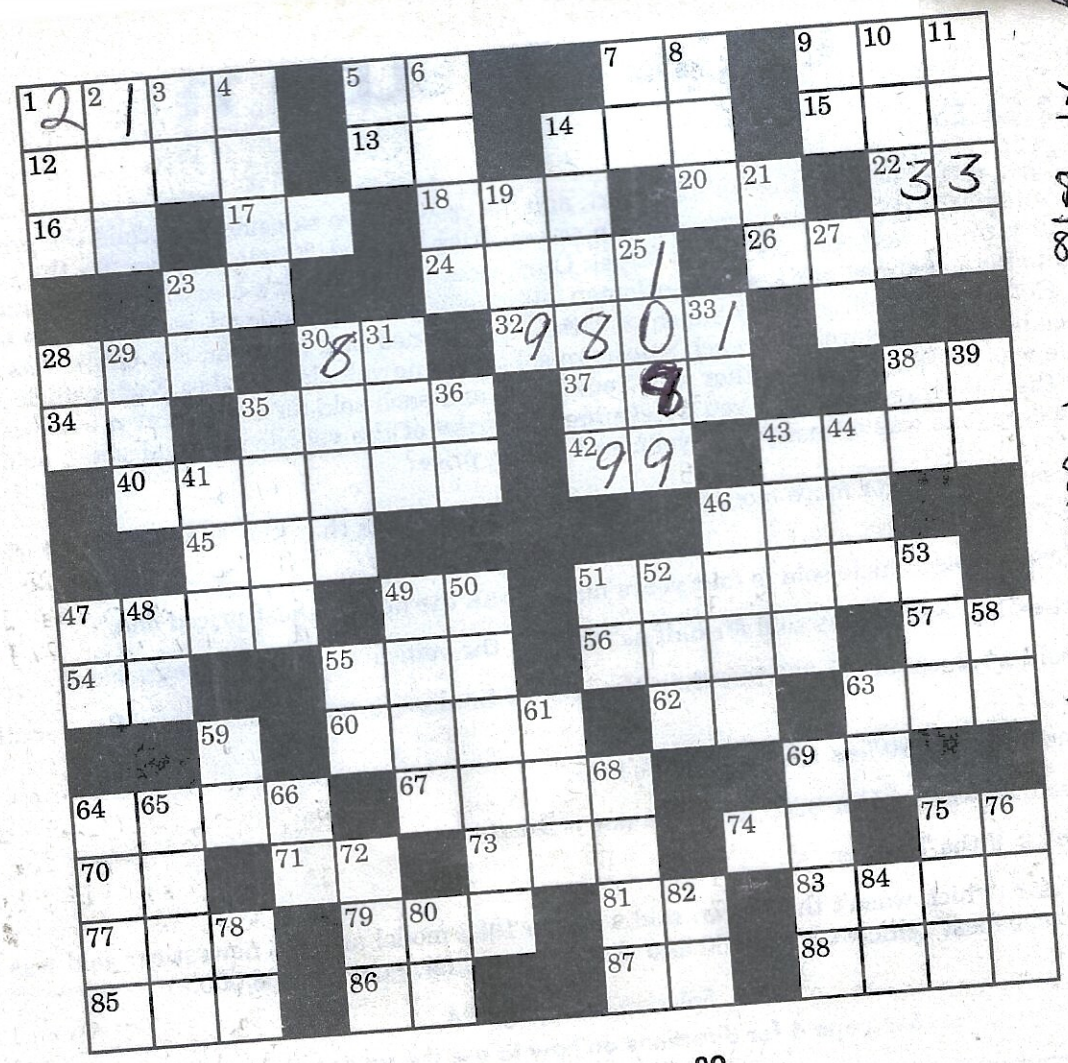
Starting help is on page 98.

ACROSS

1. One-fourth of 30-Down
5. 23-Down plus 27-Down
7. One-third of 29-Down
9. A perfect square
12. Digits of 10-Down rearranged
13. 29-Down minus 34-Across
14. Square of 16-Across
15. Three times 77-Across
16. Digits of 5-Across reversed
17. 54-Across plus 48-Down
18. The sum of its digits is 78-Down
20. 49-Across minus 28-Down
22. Square root of 25-Down
23. 16-Across plus 33-Down
24. Digits of 25-Down rearranged
26. This divided by the sum of its digits is 52-Down
28. 12-Across divided by 33-Down
30. 32-Across divided by 9-Across
32. Digits of 25-Down reversed
34. 30-Across plus 27-Down
35. 70-Across times 29-Down
37. The sum of its digits is 78-Down
38. 70-Across minus the sum of its digits
40. 30-Down times 78-Down
42. Square root of 32-Across
43. 23-Across times 3-Down
45. 23-Across times 9-Down
46. 86-Across times 5-Down
47. 49-Across times 29-Down
49. Consecutive digits in some order
51. 9-Across times 11-Down
54. 33-Down plus 36-Down
55. 44-Down divided by one of its digits
56. 23-Across times 77-Across
57. The sum of its digits is 51-Down
60. 63-Across times 23-Down
62. 3-Down plus 9-Down
63. 42-Across plus 31-Down
64. Number that reads the same backwards and forwards
67. 3-Down times 9-Down
69. 18-Across divided by 51-Down
70. 16-Across plus 23-Down
71. 59-Down plus 66-Down
73. 64-Across divided by 33-Down
74. Number halfway between 81-Across and 3-Down
75. 69-Across minus 51-Down
77. The sum of its digits is 33-Down
79. 7-Across times 9-Down
81. 62-Across minus 86-Across
83. 9-Down times the square of 59-Down
85. A multiple of 16-Across
86. Last two digits of 41-Down reversed
87. 57-Across minus 55-Down
88. Square of 3-Down

DOWN

1. One digit is the sum of the other two digits
2. 16-Across times 33-Down
3. 30-Down divided by 9-Across
4. 5-Across times 23-Across times 33-Down
5. One-half of 80-Down
6. 69-Down divided by one of its digits
7. Square root of 67-Across
8. 3-Down times 33-Down
9. 1-Across divided by 9-Across
10. Consecutive digits, but not in order
11. 9-Across times 33-Down
14. 14-Across times 37-Across
19. The sum of its digits is 16-Across
21. 81-Across minus 27-Down
23. 1-Down divided by 33-Down
25. One-ninth of 32-Across
27. 28-Down minus 63-Down
28. 16-Across times one of its digits
29. 49-Across plus 66-Down
30. Digits of 1-Across reversed
31. 69-Across plus 29-Down
33. Square root of 9-Across
35. 49-Across times 69-Across
36. 22-Across plus 33-Down
38. Number halfway between 38-Across and 78-Down
39. 16-Across plus 49-Across
41. Square of 23-Down
43. 7-Down times 28-Down
44. 14-Down minus 40-Across
46. 9-Down times 27-Down times 59-Down
47. 69-Across plus 51-Down
48. A perfect square
49. Square of 30-Across
50. This and 25-Down together contain all ten digits
51. 88-Across divided by 76-Down
52. 57-Across times one of its digits
53. Square of 86-Across
55. Number halfway between 16-Across and 78-Down
58. The digits of 57-Across reversed
59. Consecutive digits in some order
61. 7-Across times 38-Across
63. 36-Down minus 55-Down
64. The digits of 12-Across rearranged
65. Square of 69-Across
66. 59-Down times one of its digits
68. 87-Across times 58-Down
69. 44-Down times one of its digits
72. Square of 5-Across
75. One digit is the product of the other two digits
76. Square of 9-Down
78. 10-Down divided by 2-Down
80. A perfect square
82. A multiple of 5-Across
84. The digits of 55-Down reversed



Solution is on page 89

WHAT'S THE ORDER?

We asked a solver on the street to try to guess a 4-digit number combination, each a different digit. The solver took five guesses, which appear below. In each try, our solver had at least part of the combination correct, as noted by the symbols appearing next to each guess. An "X" next to the combination stands for a correct digit in its correct place in the combination, and an "O" stands for a correct digit out of its correct order. For example, combination D has been given an O and an X, so two of the four digits 7, 5, 1, and 6 appear in the final combination — one in the position given (for example, 7 might be the first digit of the correct combination), and one in a different position (5 might be the last digit of the combination). The placement of the symbols does not correspond to any particular place in the combination. Using the five graded guesses together, can you deduce the correct combination?

Answer is on page 98.

A.	2	4	3	9	O
B.	7	2	6	1	X
C.	5	9	8	4	OX
D.	7	5	1	6	OX
E.	8	3	6	9	OO

LOGIC PROBLEM 11

USED CAR SALES

by Mike Akers

Alex Terwilliger, owner of Terwilliger's Automart, and his crew of five salesmen watched the premiere broadcast of the Automart's latest TV commercial. On screen, Alex hawked, "Come on down for the sweetest deals on high-quality, pre-owned vehicles! Don't forget: Our prices are so low, it's crazy!" At the commercial's end, Alex turned to his sales staff and said, "Gentlemen, after seeing our dynamic ad, we're going to be overrun by car buyers. Get ready to sell a whole bunch of cars!" As it turned out, however, the public was not quite as enthusiastic about Alex's wares, and each salesman sold just one vehicle that day. Each vehicle was a different year (one was a 1992 model; another was from 1995), and each sold for a different price. From this information and the following clues, can you determine the make of the vehicle each salesman sold (one was a Boomer), the type (one was a luxury car), year, and selling price?

1. Cudahy sold the van for more money than the Loon, but for less than the 1993 model (which wasn't the compact car).
2. The highest-priced vehicle sold is four years newer than the next highest-priced one.
3. The sport-utility vehicle was sold for half as much as the vehicle that's seven years older.
4. Ebersol sold a vehicle for $1,000 less than the sedan's final price, but for more than the Caballero's final price.
5. The Firenze cost $1,000 less than Dowling's sale.
6. Baxter's vehicle was sold for $250 less than one other car.
7. Arlen didn't sell the Trekker.
8. The oldest car (which wasn't the sedan) sold was the 1988 model and the newest car sold was the 1999 model. The cheapest vehicle cost $1,250 and the most expensive one cost $3,000.

Solution is on page 94.

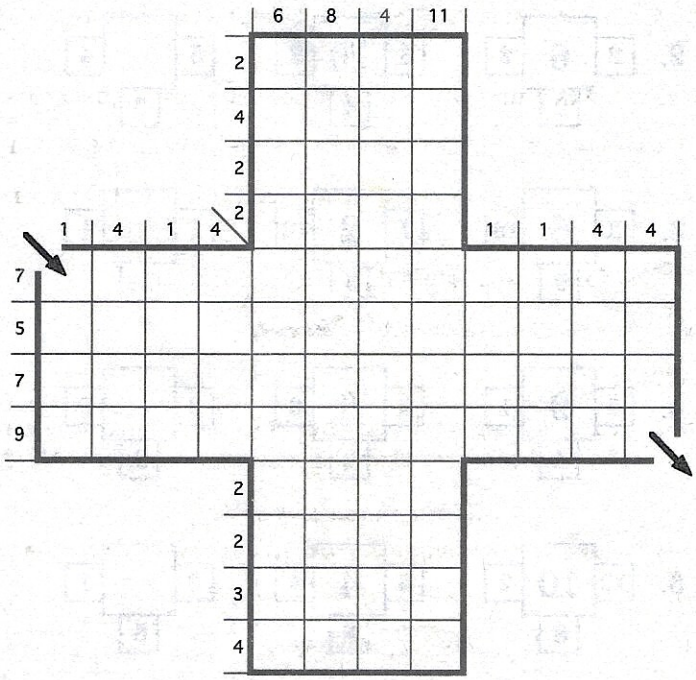
See page 6 for directions on how to use the solving chart.

	Boom.	Cab.	Fire.	Loon	Trek.	comp.	lux.	sed.	SUV	van	year '88	year '92	year '93	year '95	year '99	price				
Arlen																				
Baxter																				
Cudahy																				
Dowling																				
Ebersol																				
price																				
price																				
price																				
price																				
price																				
year 1988																				
year 1992																				
year 1993																				
year 1995																				
year 1999																				
compact																				
luxury																				
sedan																				
SUV																				
van																				

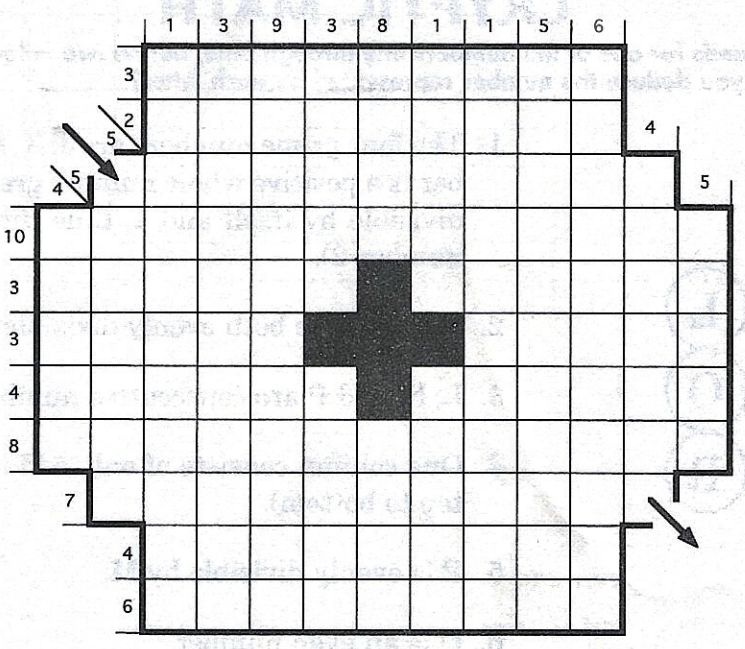
MATH MAZES

The goal here is the same as in any maze: Draw a single line from start to finish without crossing your own path. What makes this special, though, is that you'll have to use some deductive reasoning to find your way. The maze is divided into squares; the number at the beginning of each row and column tells you exactly how many of those squares to cross through in order to correctly reach the finish. For example, in Math Maze 1, the number 7 is at the beginning of the first row across; this means you must cross through seven of the boxes in that row once each. You need not cross through all seven at once; you may leave a row or column and return to it — you might cross the first box of the first row, then continue straight down, but you would have to return to the first row later so that you use exactly seven boxes before you finish the maze. No diagonal moves are allowed. Solving hint: To begin, blacken any box that you determine will not be used, and place a dot in any box that you know must be used. NOTE: Do not pass through the black boxes in Math Maze 2. **Solutions are on page 91.**

1.



2.

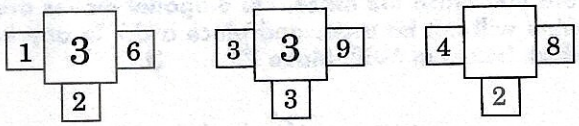


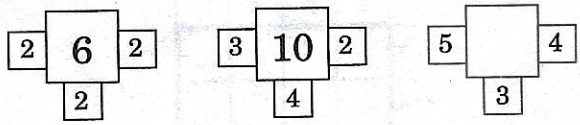
MATHEMATICAL DEDUCTION

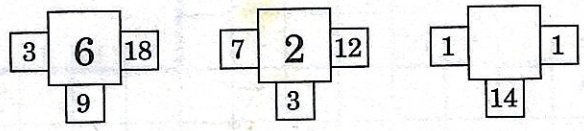
Each of the puzzles below consists of two completed sets and one uncompleted set. To solve, use math and deductive reasoning to figure out the mathematical sequence used to arrive at the numbers in the center boxes of the two complete sets, and so discover what number belongs in the blank box of the third. Each puzzle has a sequence which is carried through for all three sets. You might use addition, subtraction, multiplication, or division. No fractions or negative numbers are involved, and each number surrounding its center box will be used exactly once.

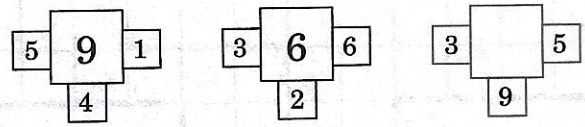
Answers are on page 97.

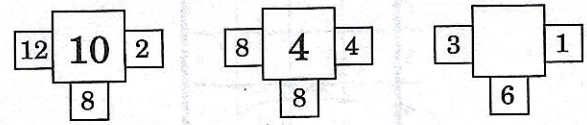
Swimming at OCC on March 9 (vs. Santa Ana), and March 14 (vs. Golden West)

1. 

2. 

3. 

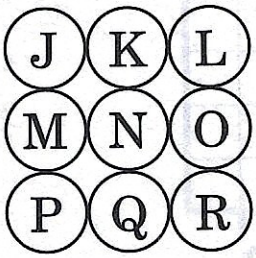
4. 

5. 

CRYPTIC MATH

Each of the nine letters stands for one of the numbers one through nine, but no two letters stand for the same number. Using the clues, can you deduce the number represented by each letter?

Solution is on page 97.



1. The four prime numbers are J, K, L, and M (a prime number is a positive whole number greater than 1 that is only divisible by itself and 1; thus the smallest prime is the number 2).
2. N and R are both evenly divisible by J.
3. L, N, and P are consecutive numbers in some order.
4. One column consists of only odd numbers (columns read top to bottom).
5. P is evenly divisible by M.
6. O is an even number.

WORD ARITHMETIC

See page 15 for solving directions.

Answers are on page 98.

37.

0 1 2 3 4 5 6 7 8 9

```
          CUT
   KICK | THORNY
          YCOY
          CNTTN
          COTUO
           KHIKY
           CUIHN
            CHCT
```

38.

0 1 2 3 4 5 6 7 8 9

```
          JUT
   TAT | REFUSE
          RCAA
           UCES
           TAT
           EJUE
           KETA
            CJJ
```

39.

0 1 2 3 4 5 6 7 8 9

```
          SO
   YET | SLEET
          EOSL
           BOUT
           BTZF
            UFY
```

40.

0 1 2 3 4 5 6 7 8 9

```
          NOR
  SONG | CHASES
          CNSA
           ROCE
           SONG
           GLANS
           NCCAO
            ORAG
```

41.

0 1 2 3 4 5 6 7 8 9

```
          GOO
   KIN | IGLOOS
          INGE
           NPEO
           IEVN
            NIGS
            IEVN
             NVV
```

42.

0 1 2 3 4 5 6 7 8 9

```
          TOW
  OUT | TRUSTS
          IABA
           LOLT
           LITA
            BTWS
            LWLB
             AUU
```

43.

0 1 2 3 4 5 6 7 8 9

```
          AT
  WARP | LARIAT
          HRPP
           WPIAT
           YHARP
            AYGT
```

44.

0 1 2 3 4 5 6 7 8 9

```
          SEED
  RUT | STREETS
          TIDA
           EOEE
           DTDO
            ENIT
            DTDO
             IROS
             ISUE
              UED
```

45.

0 1 2 3 4 5 6 7 8 9

```
          DAY
 KINK | KATYDID
          KNUYG
           AGNYI
           KINK
            TUYAD
            HYIHU
             TKKK
```

LOGIC PROBLEM 12

POKER NIGHT

by Todd Rew

Five gambling buddies got together last weekend for a night of poker. Each man brought $50 to the game, and by the end of the evening, various amounts had changed hands. Only the money they brought with them was used, and there were no outstanding debts. From the information provided, can you determine the full name of each player (one last name is Rogers) and how much money each player left with, as well as where the players sat in relation to each other at the table?

1. Seated clockwise at the table were Jim, Mr. Jones, Bob Finney, the man who won twenty dollars, and the man who lost the most.

2. The two players to Mr. Norris's left both lost money; among them, Ed lost less.

3. The amount one man lost was two-and-a-half times the amount won by Sam, who sat on his right.

4. Mr. Phillips sat between Dave and the man who lost forty-five dollars.

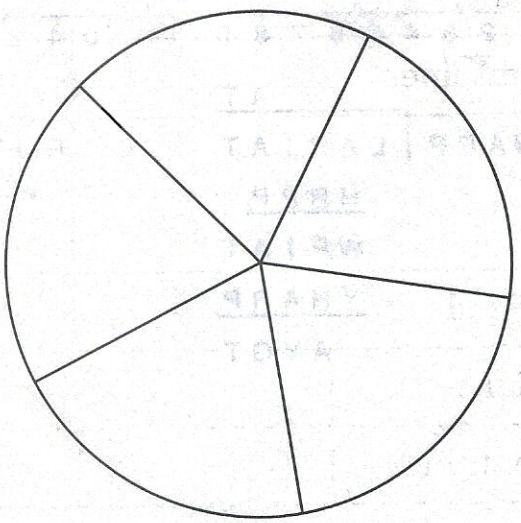
5. One man went home with ten dollars more in his pocket than another man, but they did not sit next to each other.

Solution is on page 94.

The solving chart and card table diagram below were found to be most helpful in solving this Logic Problem.

	Finney	Jones	Norris	Phillips	Rogers	amount taken home				
Bob										
Dave										
Ed										
Jim										
Sam										

amt. taken home						



LOGIC PROBLEM 13

BRENDA'S HANGING GARDEN

by Jean M. Hannagan

Brenda's new apartment has a large, sunny window, which she decided was the perfect spot for the eight plants she received as housewarming gifts from Marion and seven other friends. Each plant (one is Swedish ivy) came in its own distinctive container (one is in a hand-painted floral pot). Brenda hung the plants in two rows that spanned the window, with four plants in a row, and took a photograph of her indoor garden to send to her gift-giving friends. She numbered the top row plants in the photo 1 – 4 (from left to right), and the bottom row plants 5 – 8 (also from left to right) so she could list each friend's given gift, container, and number on the back of the photo. From this information and the following clues, can you determine what Brenda wrote?

1. The fern is somewhere to the right of the yellow basket, which wasn't Michelle's gift.
2. The spider plant hangs somewhere to the right of the one in a dark green pot, and the coleus is somewhere to the left of the jade plant. Denise didn't give her the philodendron, which is somewhere above the pothos.
3. Brenda hung the plants from Anne and Sue in diagonally opposite corners of the window. Val's gift is directly below the one in a white basket.
4. The pothos is between the white pot and Pam's gift, which isn't in the light green pot.
5. The plant in the dark green pot hangs somewhere below Louise's gift. The begonia, which wasn't Sue's gift, is somewhere under the fern.
6. The plants in the white and green baskets don't hang next to each other.
7. The jade plant and the one in the light green pot are as far apart as possible.
8. The brass pot is somewhere below Denise's gift. Louise's is somewhere to the right of the begonia.
9. The coleus is somewhere to the right of the one in a white pot, and the light green pot is somewhere below Anne's gift.

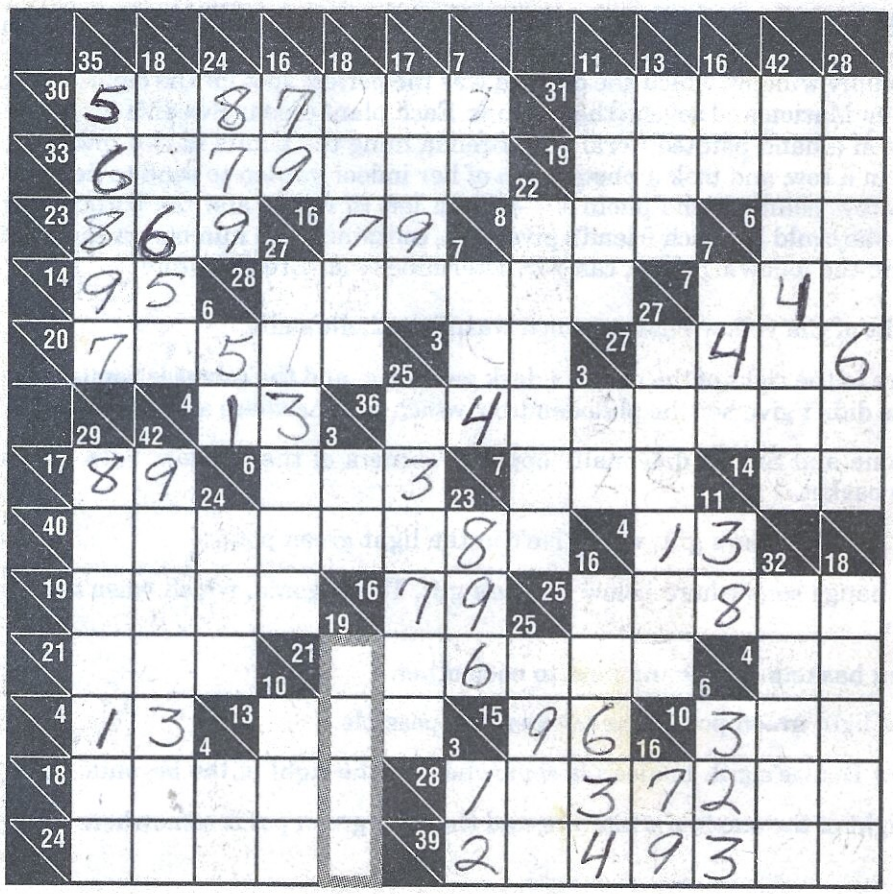
Solution is on page 95.

The fill-in chart below was found to be most helpful in solving this Logic Problem.

	1	2	3	4
friend				
plant				
container				

	5	6	7	8
friend				
plant				
container				

CROSS SUMS



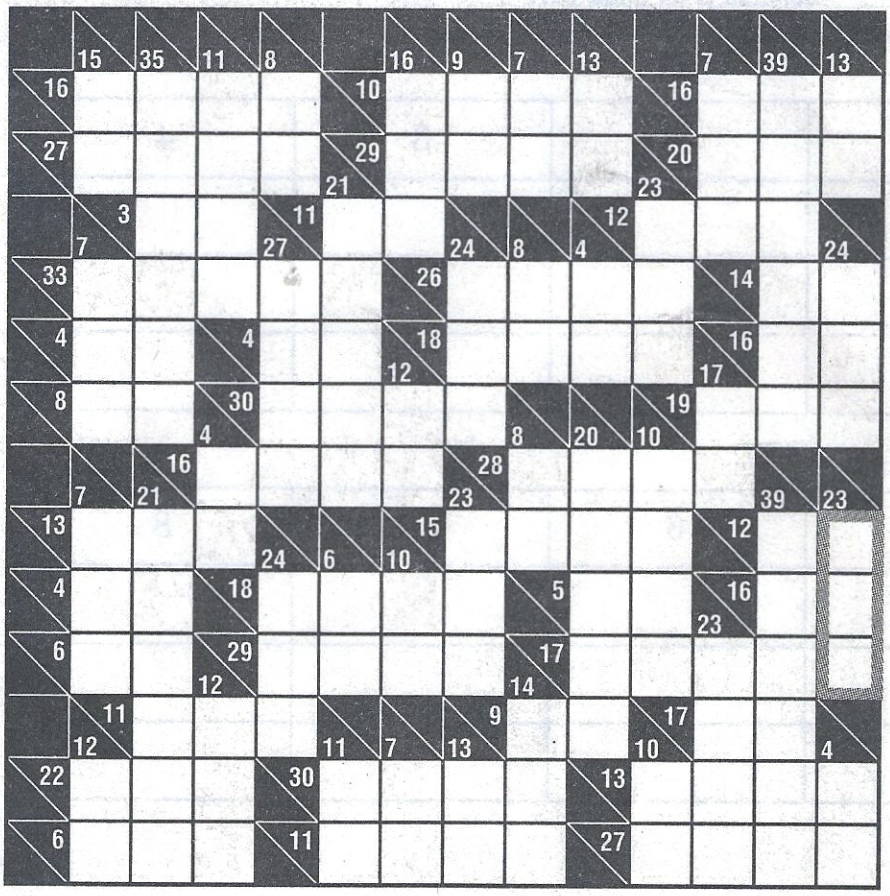
21.

We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 88.

Directions for solving are on page 8.

34 35



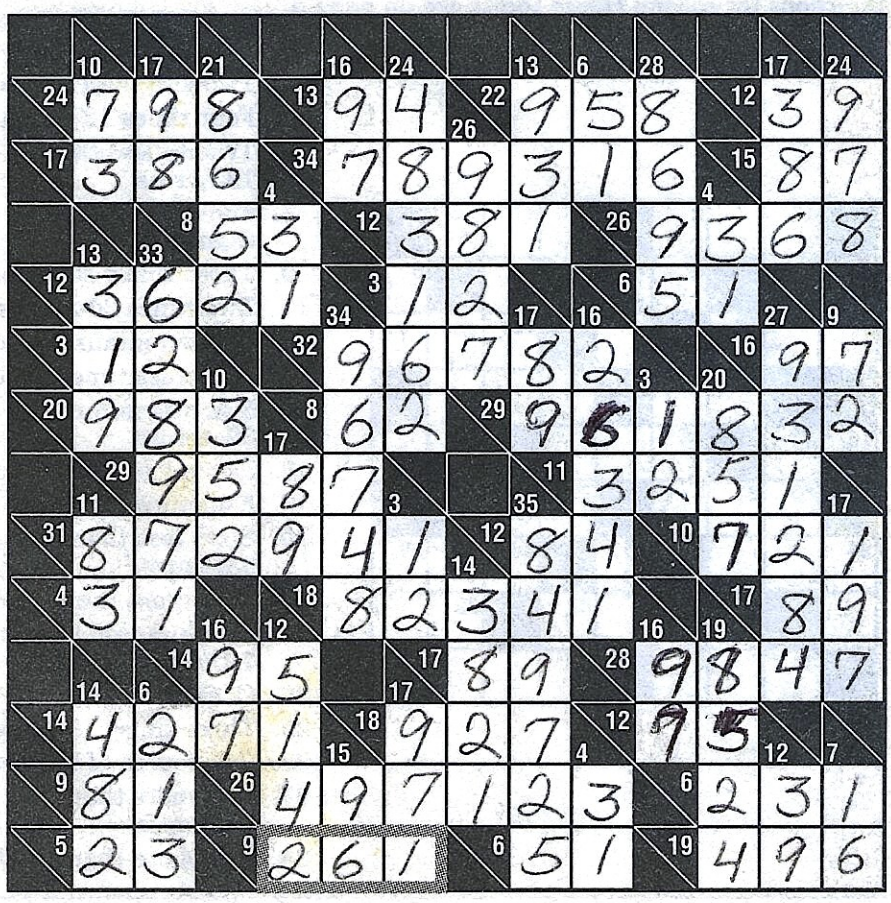
22.

Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

23.

Solutions are on page 88.



24.

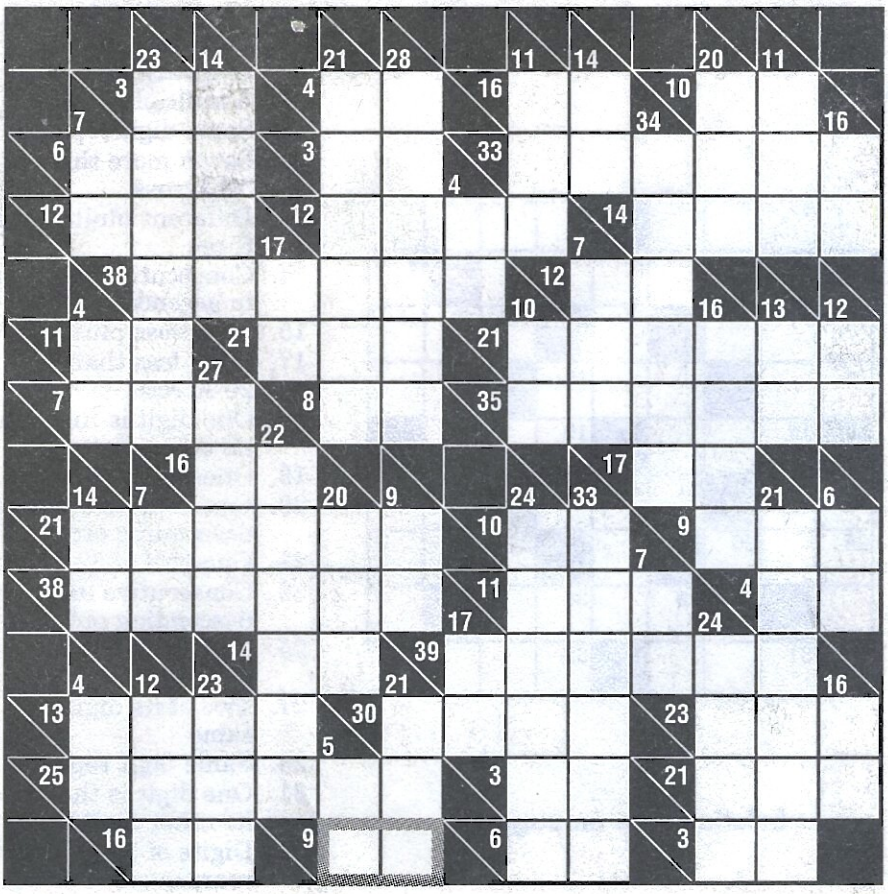
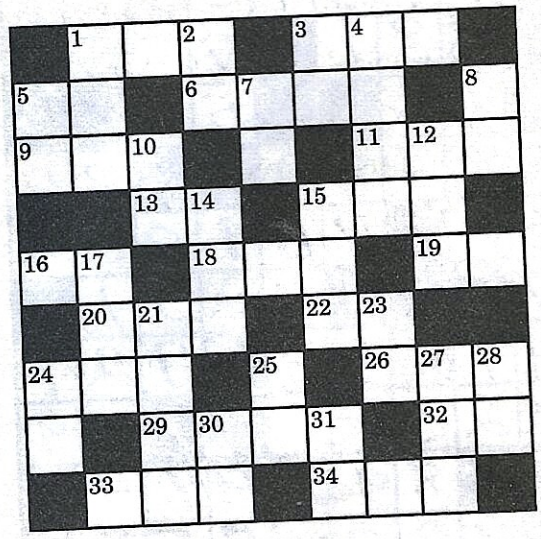


FIGURE LOGICS 9 & 10

by Linda Thistle

Directions for solving Figure Logics are on page 5.

Starting helps are on page 98.

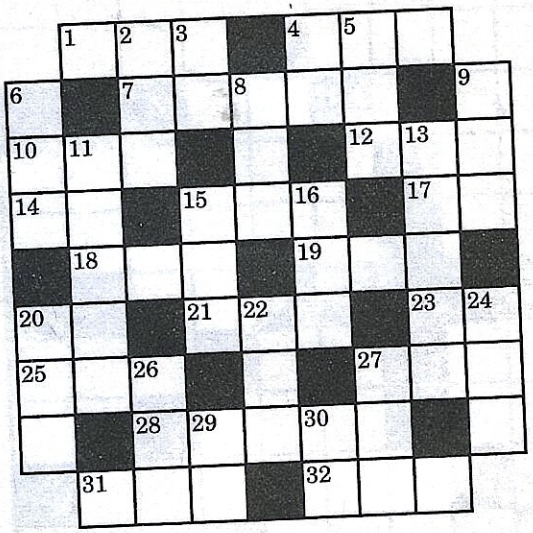


ACROSS

1. Two less than 27-Down
3. Four times 12-Down
5. Twenty less than 19-Across
6. Five thousand more than 21-Down
9. Three times 34-Across
11. Two times 20-Across
13. 8-Down minus 28-Down
15. 16-Across times 7-Down
16. 5-Across minus 32-Across
18. Seven less than 3-Across
19. Four times 25-Down
20. Sixty less than 33-Across
22. Four more than 7-Down
24. Two hundred less than 1-Down
26. Consecutive digits
29. Three times 18-Across
32. One-fourth of 23-Down
33. Two more than 15-Across
34. Two more than 12-Down

DOWN

1. Seven times 10-Down
2. Twenty more than 5-Down
3. One less than 10-Down
4. Seven hundred less than 29-Across
5. 22-Across plus 25-Down
7. 3-Down minus 31-Down
8. 19-Across plus 2-Down
10. 8-Down minus 32-Across
12. Twenty less than 11-Across
14. One more than 24-Across
15. One-half of 14-Down
17. 1-Across plus 12-Down
21. Six hundred less than 4-Down
23. Two less than 2-Down
24. Three more than 13-Across
25. Thirty less than 30-Down
27. Sixty more than 26-Across
28. 16-Across plus 23-Down
30. Three times 22-Across
31. Two times 24-Down



ACROSS

1. Digits of 4-Across rearranged
4. A multiple of seven
7. Same digit repeated
10. Seven more than 31-Across
12. Different multiples of three
14. Consecutive even digits in ascending order
15. 19-Across plus 9-Down
17. Sixty less than 20-Across
18. One digit is the sum of its other digits
19. One-half of 6-Down
20. Consecutive digits in descending order
21. One-half of 32-Across
23. Consecutive digits in descending order
25. Sum of its digits is 30-Down
27. Two of its digits are the same
28. Same digit repeated
31. One digit is the sum of its other digits
32. Digits of 10-Across rearranged

DOWN

2. 20-Down minus 1-Across
3. Consecutive digits in ascending order
4. One-third of 3-Down
5. Consecutive digits in ascending order
6. Consecutive even digits
8. One digit is the sum of its other digits
9. Its second digit is the sum of its other digits
11. Same digit repeated
13. Same digit repeated
15. Its last digit is the sum of its other digits
16. 19-Across minus 29-Down
20. Four times 22-Down
22. Consecutive digits rearranged
24. Two of its digits are the same
26. Digits of 18-Across rearranged
27. 8-Down plus 24-Down
29. Sum of the digits of 27-Down
30. Three more than 4-Down

Solutions are on page 89

OUT AND AROUND

To solve this puzzle, fill in the diagram by answering the clues given below. In some instances, you will find that answering the clues requires some deduction and that it will be necessary to work back and forth among the clues in order to solve one. The puzzle works in two directions: The answer to each OUTWARD clue is a 2-digit number to be entered outward from the center of the circle. For example, if the answer to OUTWARD clue 1-9 were 37, then you would enter a 3 in the space marked "1" and a 7 in the space marked "9." Each space in the diagram contains only one digit. The answer to each CLOCKWISE clue is a 3-digit number to be entered in a clockwise direction. For example, if the answer to clue 1-3 were 579, then you would enter a 5 in the space marked "1," a 7 in the space marked "2," and a 9 in the space marked "3." Note that CLOCKWISE answers overlap. For instance, the last digit of the answer to clue 1-3 is the first digit of the answer to clue 3-5.

NOTE: There are no zeros in this puzzle. A square is the product of one number multiplied by itself; 16 is a square because 4 x 4 = 16.

OUTWARD

1-9. Three times the first digit of Clockwise clue 1-3 times the second digit of Clockwise clue 1-3.

2-10. The first digit is two times the second digit.

3-11. Other clues will help you determine this number.

4-12. The first digit is one greater than the second digit.

5-13. Two different digits, each evenly divisible by 3.

6-14. A perfect square.

7-15. The second digit is the same as the second digit of the answer to Outward clue 2-10.

8-16. A perfect square, with the digits reversed

CLOCKWISE

1-3. The third digit is 1.

3-5. A perfect square.

5-7. The first digit is the product of the second and third digits.

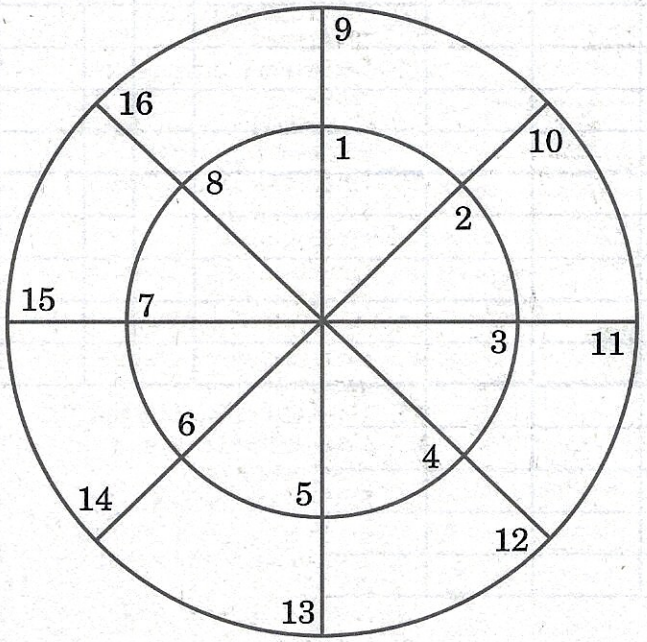
7-1. The second digit is the product of the first and third digits.

9-11. Three consecutive even digits, in some order.

11-13. Three consecutive digits, in some order.

13-15. The first two digits are the same.

15-9. None of the digits are 1; the third is the sum of the first and second digits.



Solution is on page 89

LOGIC PROBLEM 14

STRAWBERRY FIELDS

by Randall Whipkey

Stellar Strawberry Farm is known for their delicious, juicy strawberries. During the last harvest season, Moira and four other berry lovers happened to spot Stellar's roadside billboard, which invited passersby to "Pick Strawberries By the Pint!" Each woman (including Ms. Carter) subsequently spent a day at the strawberry farm, and each picked a different number of whole pints of berries. Each woman then went home and prepared a different favorite strawberry recipe (one made fresh strawberry smoothies). From this information and the following clues, can you determine each strawberry picker's full name, favorite recipe, and number of pints picked?

1. The pickers collected a total of eighty pints of strawberries.
2. Jane collected twice as many pints as Ms. Daniels, who picked five more pints than the woman who made strawberry shortcake.
3. The strawberry jam maker picked twice as many pints as Ms. Everett, who picked five more pints than Olivia.
4. Ms. Brody picked ten more pints than Kelly.
5. Jane isn't Ms. Everett.
6. The woman who made strawberry pie didn't pick the least number of pints.
7. The woman who made strawberry ice cream picked five more pints than Nancy, and also more fruit than Ms. Farrow.

Solution is on page 95.

See page 6 for directions on how to use the solving chart.

	Brody	Carter	Daniels	Everett	Farrow	ice cream	jam	pie	short.	smooth.	pints				
Jane															
Kelly															
Moira															
Nancy															
Olivia															
pints															
ice cream															
jam															
pie															
shortcake															
smoothies															

SQUARE LOGIC 2

by Linda Thistle

Each letter in the diagram below stands for a number from 1 through 36. Using the clues, can you deduce the number represented by each letter? As you will see from clue 2, when all the numbers have been correctly entered into the diagram, it will be a magic number square. As each number from 1 through 36 is used only once (clue 1), you will find it helpful to cross out each number as you place it in the diagram. **Solution is on page 88.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

CLUES

1. Only the whole numbers from 1 to 36 are used. Each number is used only once, and all thirty-six numbers are used.

2. The six numbers in each row across, each column down, and each of the two diagonals add up to 111.

3. The squares A, E, F, FF, GG, and HH contain numbers greater than 30.

4. D is one-half of CC. CC is one-half of U. U is one-half of FF.

5. L is one-fifth of E, one-fourth of BB, one-third of P, and one-half of Q.

6. S is one more than X and one less than T.

7. Z is one-half of O and one-third of HH.

8. JJ is one-third of C. C is one-third of AA. AA is one-fourth of A.

9. The sum of the corner squares (A, F, EE, and JJ) is the same as the sum of the center squares (O, P, U, and V).

A 36	B	C 3	D 4	E 35	F
G	H	I	J	K	L 7
M	N	O 22	P 21	Q 14	R
S	T	U 16	V	W	X
Y	Z 11	AA 9	BB 28	CC 8	DD
EE	FF 32	GG	HH 33	II	JJ 1

LOGIC PROBLEM 15

TIME AND TIME AGAIN

by Evelyn B. Rosenthal

Clara keeps a digital clock-radio in each of the five rooms in her apartment. Though all five clocks have working radios, unfortunately, all but one have at least one broken feature! Consequently, at any given moment, each clock reads a different time, and only the unbroken one tells the correct time. Each clock-radio is a different color (one is black) and each is set to a different station (one is tuned to a rock station). One day last week, one clock's alarm went off. In less than a minute, and before any clock had advanced to the next minute, Clara had checked all five to see which one was beeping, noted the time shown on each, and turned off the alarm. From this information and the clues below, can you determine the color of the clock in each room, its radio station setting, and time shown when Clara checked it?

1. The clock in the bedroom is the only one that tells the correct time; the time shown on the bathroom clock (which doesn't work at all) never changes.
2. The clock in the dining room shows the correct minutes, but the hour always reads "3"; the living-room clock is always exactly 19 minutes fast.
3. Either the green or yellow clock (neither of which is set to a music station) is the kitchen clock. The kitchen clock runs, but never shows the correct hour or minutes.
4. The tan clock and the one featuring the talk-radio station showed the earliest and latest times, in some order.
5. The time shown on the yellow clock equaled the sum of the times shown on the clock set to the country-music station and the clock set to the news station.
6. The red clock-radio, which is set to a classical music station, read 4:15.
7. The time shown on the clock that blared country music equaled the sum of the times shown on the tan clock and the dining room clock (which was the only one to show the hour of "3").

Solution is on page 95.

See page 6 for directions on how to use the solving chart.

	black	green	red	tan	yellow	classical	country	news	rock	talk	time shown				
bathroom															
bedroom															
dining room															
kitchen															
living room															
time shown															
classical															
country															
news															
rock															
talk															

WORD ARITHMETIC

See page 15 for solving directions.

Answers are on page 98.

46.

0 1 2 3 4 5 6 7 8 9

```
      OR
ALAN | SNAIL
       GRFG
       LALGL
       LFIVR
        LROI
```

47.

0 1 2 3 4 5 6 7 8 9

```
      ODE
TAT | COATED
      CSCL
       ONLE
       OOLS
        ESED
         TAT
         OOK
```

48.

0 1 2 3 4 5 6 7 8 9

```
      ERE
FUR | SMART
      FUR
      NUSR
      NFSF
        SLT
        FUR
        ATF
```

49.

0 1 2 3 4 5 6 7 8 9

```
      ANY
BIT | STAIN
      BIT
      ABBI
      ARNE
       NTEN
       NNSN
        ASM
```

50.

0 1 2 3 4 5 6 7 8 9

```
      RAT
WRY | TIGER
      WRY
      RWTE
      RAAW
       BOYR
       BAER
        ABG
```

51.

0 1 2 3 4 5 6 7 8 9

```
      OCA
BACK | FITFUL
      OTFL
       CUKU
       CUBI
        CFL
```

52.

0 1 2 3 4 5 6 7 8 9

```
      LET
MAP | MOBILE
      OEAA
       MPML
       MOLB
        OAOE
        OMOT
         MCA
```

53.

0 1 2 3 4 5 6 7 8 9

```
      NO
NEAR | MERGER
      MMNOI
       RMCCR
       RICMG
        OBRI
```

54.

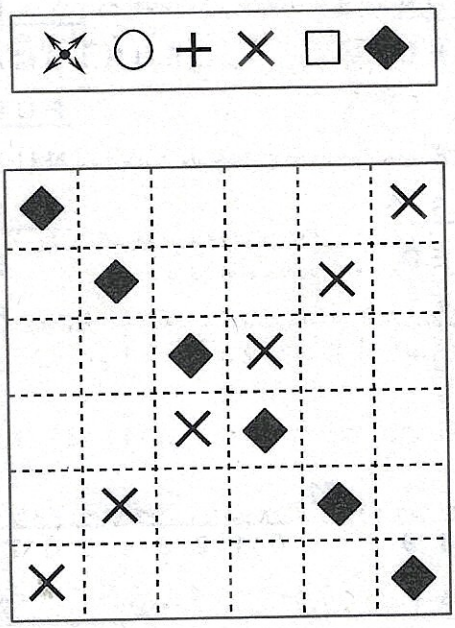
0 1 2 3 4 5 6 7 8 9

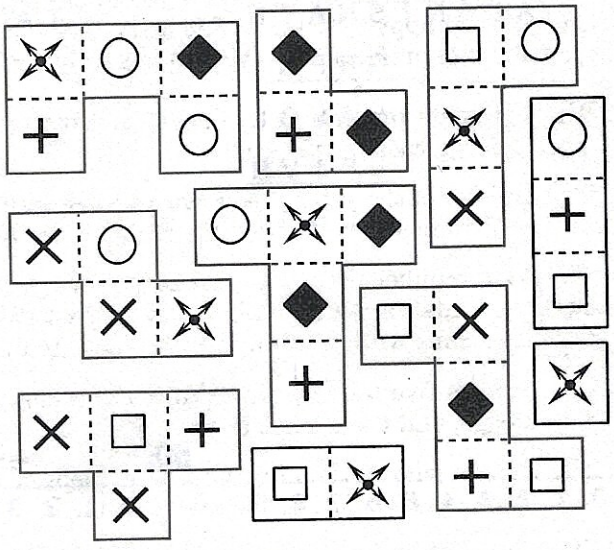
```
      TOO
HAY | STARTS
      SYRH
       YHOT
       YGGU
        YSNS
        YGGU
         GUO
```

JIGSAW LOGIC

All you have to do to solve this puzzle is fit the ten pieces below into the grid so that each line across and each line down contains the six different symbols pictured above the grid. The symbols already in the grid are there to help you figure out how the pieces fit together and should not be moved or changed in any way. Likewise, each of the ten pieces must be kept as a unit as it is pictured. The pieces can be turned in any direction to fit into the grid. When you've finished, no symbol will be repeated within a line either across or down.

Solution is on page 89.





SECRET SQUARES

The sum of the numbers in each row, column, and long diagonal of the magic number square below equals 91. However, each of its digits 0 through 9 has been replaced by a different letter of the alphabet. It's your job, then, to determine the numbers that should be written in the 16 squares.

Solution is on page 89.

JA 28	ZZ 11	ZH 17	LR 35
ZR 15	LH 37	ZN 19	JT 20
CJ 42	LZ 31	C 4	ZC 14
E 6	ZJ 12	RZ 51	JJ 22

LOGIC PROBLEM 16

THERE'S A GOOD EGG!

by David Champlin

During World War II, a kindly widow by the name of Henrietta Henn earned her living by running a highly respectable and immaculately kept boardinghouse for five differently employed tenants. Three of her boarders lived in rooms 1, 2, and 3 on the ground floor, while the remaining two lived upstairs in rooms 4 and 5. The layout of their rooms was identical, but each room was uniquely decorated in a different color. Because of wartime rationing, each roomer was allotted only one egg per week, which he or she savored as a Sunday breakfast treat. Each tenant preferred his or her egg cooked in a different way (one loved coddled eggs), which Mrs. Henn was happy to prepare. From this information and the following clues, can you determine each tenant's job and egg preference, as well as his or her room color and number?

1. The two male tenants, whose room numbers weren't consecutive, were the mechanic and the one who liked his egg cooked over-easy.
2. The number of the yellow room with yellow wallpaper (which wasn't Carlotta's) was one digit higher than that of Veronica's, which was one digit higher than that of the schoolteacher's room.
3. The room number of the ivory room was one digit lower than that of the room occupied by the hard-boiled egg lover. Adela's room number was at least two digits lower than that of the salesclerk's room. All four of these rooms were furnished with a bed, chair, and bookshelf.
4. Mrs. Henn's five tenants were: Tom, the occupant of the blue room, the reporter, the one who liked soft-boiled eggs, and the tenant in room 5.
5. The woman who worked for the Department of Motor Vehicles (who hated hard-boiled eggs) lived on the floor above the woman in the green room.
6. The odd-numbered rooms were, in some order, Marcus's, the poached egg lover's room, and the lavender one.

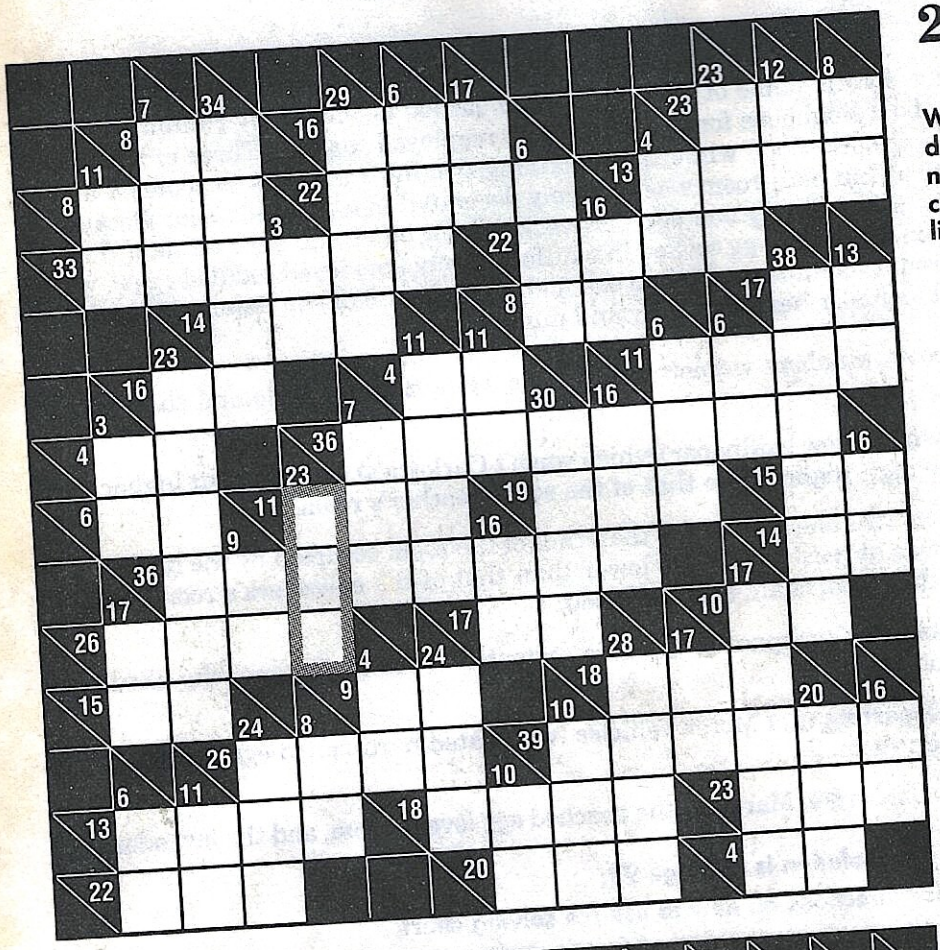
Solution is on page 95.

See page 6 for directions on how to use the solving chart.

	DMV	mech.	report.	sales.	teach.	coddled	hard.	over.	poached	soft.	blue	grn.	ivor.	lav.	yell.	1	2	3	4	5
Adela																				
Carlotta																				
Marcus																				
Tom																				
Veronica																				
1																				
2																				
3																				
4																				
5																				
blue																				
green																				
ivory																				
lavender																				
yellow																				
coddled																				
hard-boiled																				
over-easy																				
poached																				
soft-boiled																				

CROSS SUMS

25.

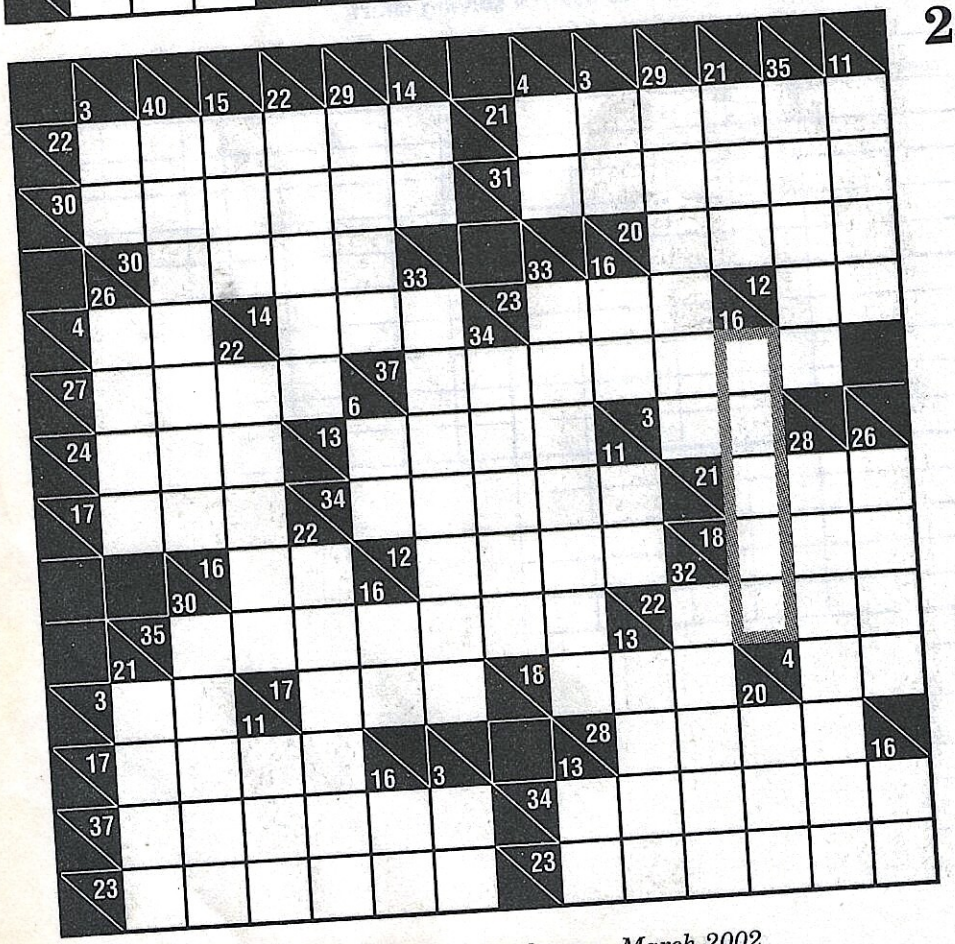


We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 98.

Solutions are on page 88.

Directions for solving are on page 8.

26.

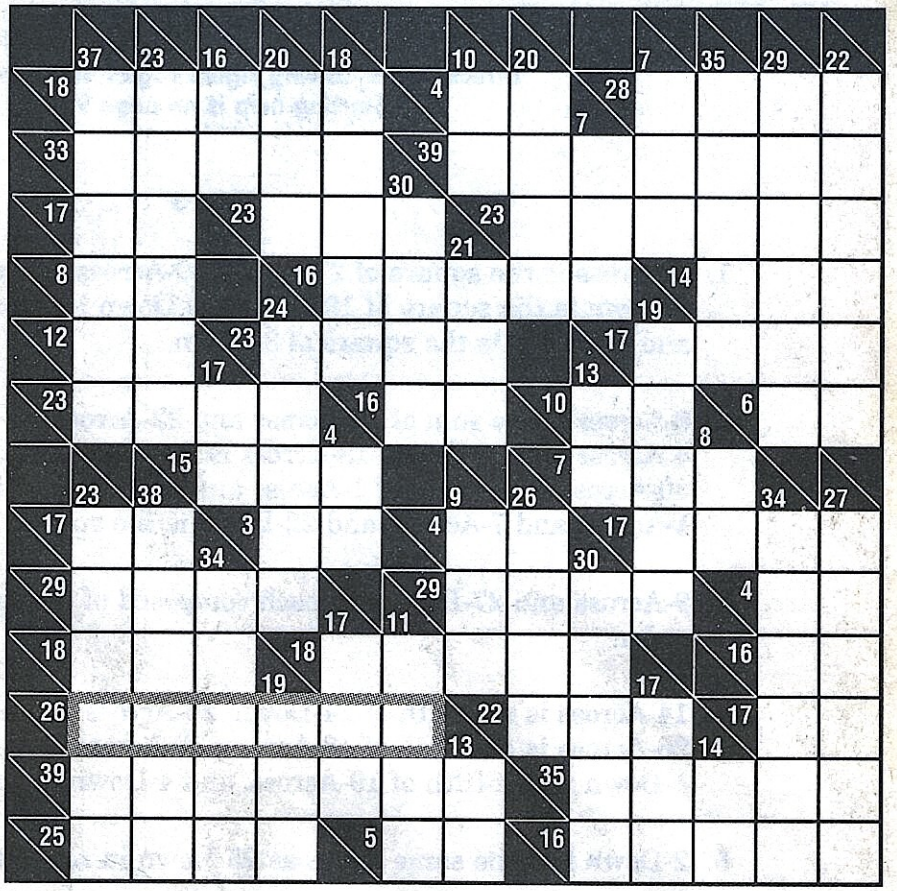


Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

CROSS SUMS

27.

Solutions are on page 88.



28.

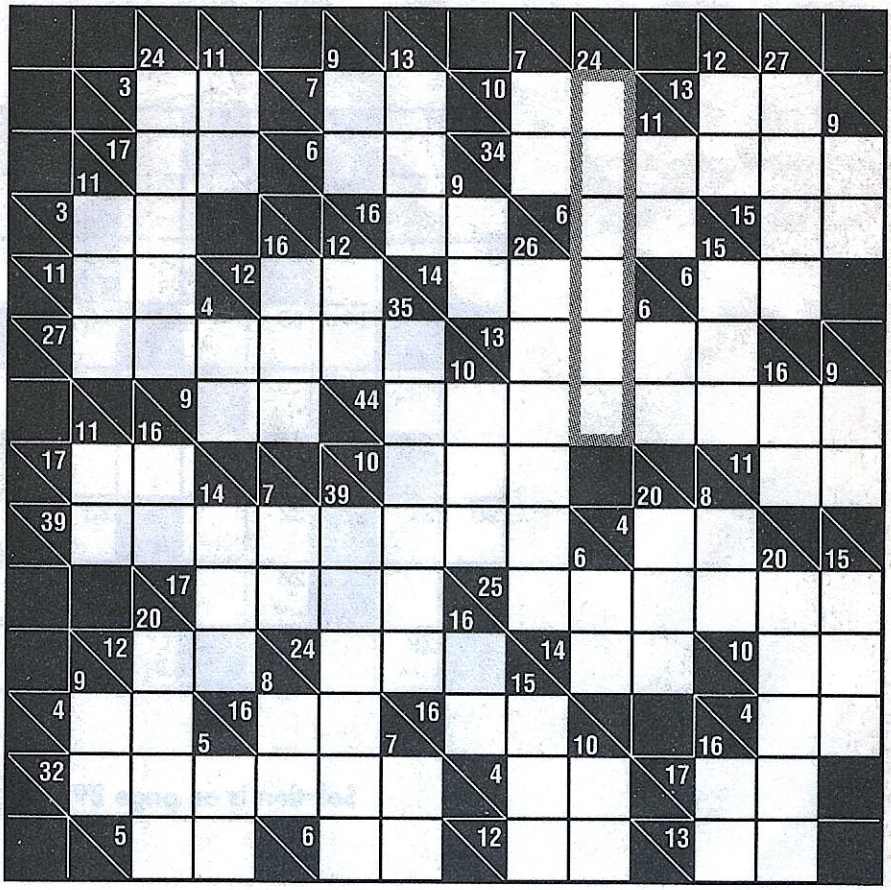


FIGURE LOGIC 11

by Linda Thistle

VARIETY

Directions for solving Figure Logics are on page 5.
Starting help is on page 98.

CLUES

1. 4-Across is the square of 27-Down, 29-Across is the square of 12-Across, 5-Down is the square of 18-Down, 10-Down is the square of 11-Across, and 16-Down is the square of 3-Down.

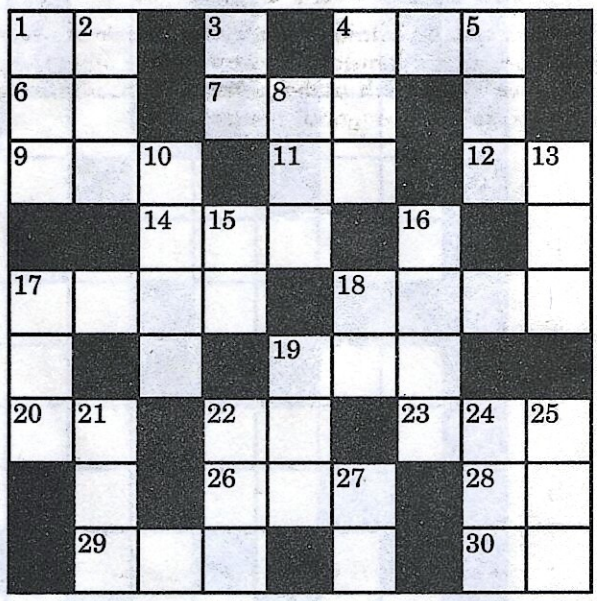
2. 6-Across is the sum of 12-Across and 22-Across, 17-Across is the sum of 4-Across and 16-Down, 18-Across is the sum of 29-Across and 10-Down, 30-Across is the sum of 1-Across and 15-Down, 19-Down is the sum of 1-Across and 7-Across, and 22-Down is the sum of 17-Down and 21-Down.

3. 9-Across and 27-Down are each composed of consecutive digits in some order.

4. 14-Across is one-fifth of 24-Down, 23-Across is one-fifth of 13-Down, 26-Across is one-fifth of 18-Across, 30-Across is one-fifth of 8-Down, 1-Down is one-fifth of 19-Across, and 4-Down is one-fifth of 17-Across.

5. 2-Down has the same digits as 25-Down in reverse order.

6. 17-Down is the product of 1-Across and 28-Across.



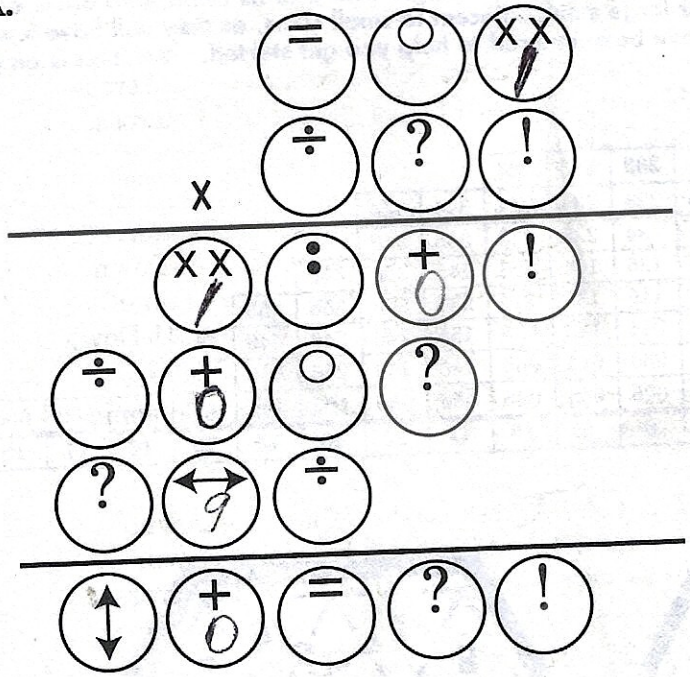
Solution is on page 89

TWO-PART MATH

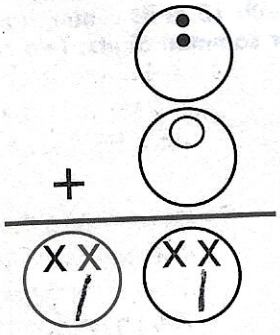
Each of the symbols in the two arithmetic problems below stands for one of the numbers 0 through 9, but no two symbols stand for the same number. Each symbol does stand for the same number through both problems, however, so if you were to place a "7" in the upper left circle in Problem A, you would also place a "7" in any other circle containing an equals symbol. By working back and forth from one problem to the other, can you deduce the number represented by each symbol?

Solution is on page 97.

A.



B.



ADDITION LOGIC

In each set of words below, each word is also an addition problem — each of the letters stands for one of the digits 1 through 9, and the sum of the values of the letters in a word equals the total given after the word. Using the addition involved, try to determine the value of each of the letters. No two letters stand for the same digit, and if R stands for 3 in one word, it will be the same throughout the problem.

Solutions are on page 97.

P + I + P + E + D = 32

S + T + A + T + E = 24

R + A + D + A + R = 10

S + T + E + A + K = 25

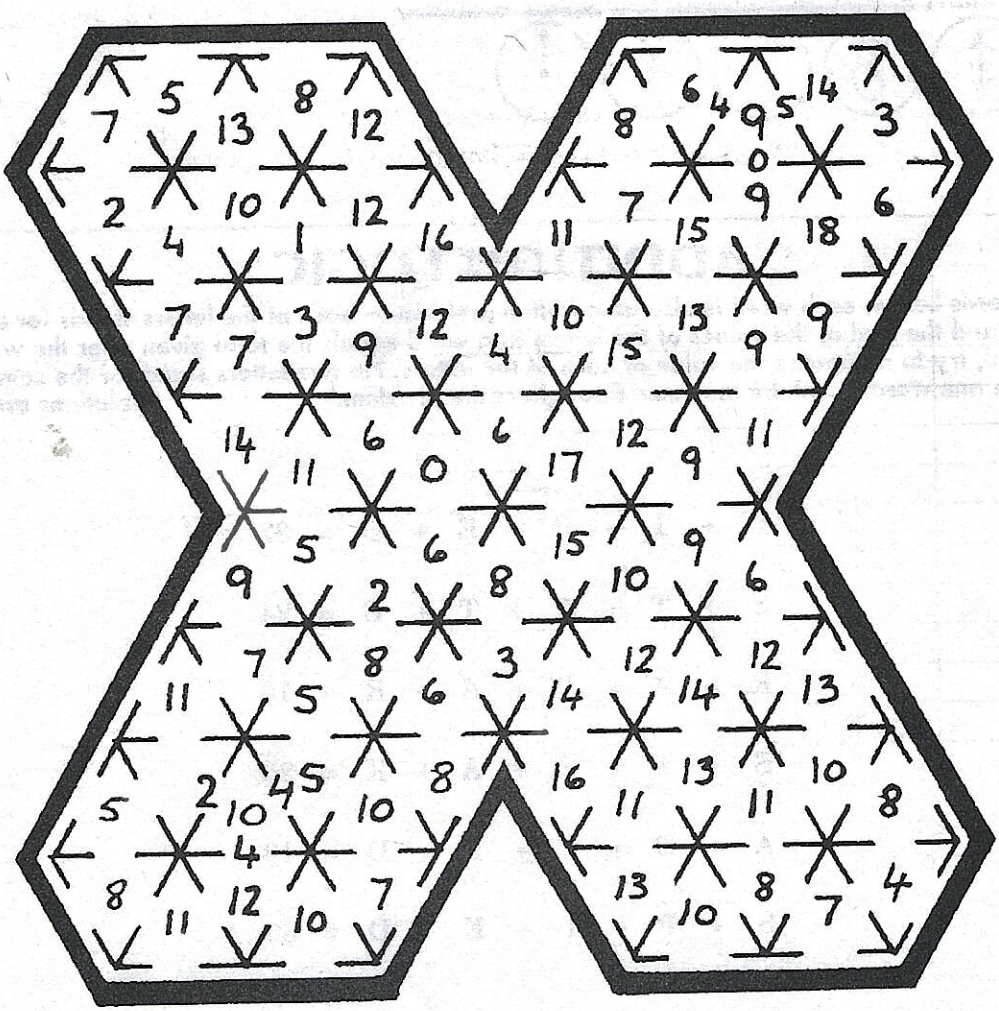
A + D + D + E + D = 13

S + P + I + E + D = 30

TRIGONS 1

Trigons will test your powers of logic and deduction. The diagram is made up of a series of open triangles with a number in the center; that number represents the sum of the digits you are to write into the spaces on the sides of the triangles. Where two triangles share a side, they share the number to be written into that side. All the combinations in this Trigons use only the digits 0 through 6. We've listed all the possible combinations for every sum in the small chart, so all you have to do is figure out which of those combinations belongs where (not as easy as it sounds!). The numbers in a combination can go in any order around their triangle, and each combination will be used exactly once. You can begin by filling in 0-0-0 around the triangle with 0 at its center and 6-6-6 around the triangle with 18 at its center. It helps to look for large sums adjacent to small sums, as they will have fewer possibilities for common digits. Two combinations have been entered to help you get started. **Solution is on page 91.**

								233	333	334								
						222	223	224	234	244	344	444						
						123	133	134	225	235	335	345						
					122	114	124	125	144	226	245	336	445					
				112	113	033	115	116	135	145	236	255	355	455				
			111	022	023	024	034	044	126	136	155	246	346	446	555			
		011	012	013	014	015	025	035	045	055	146	156	256	356	456	556		
000	001	002	003	004	005	006	016	026	036	046	056	066	166	266	366	466	566	666
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**



LOGIC PROBLEM 17

POSTER BOYS

by Julie Spence

Mike and five other new students at Ivy University occupy rooms 1 through 6 on one side of the same corridor in the men's freshman dorm. The rooms are numbered in ascending order from west to east, with 1 being the westernmost room and 6 being the easternmost one. Each young man, including Brown, brought one of his favorite posters from home, which he taped to the front of his door. From this information and the following clues, can you determine each student's full name, displayed poster, and room number?

1. Todd isn't Miller.
2. Josh's room is adjacent to both the room with the Corvette poster and the one with the wolf poster.
3. Will didn't display the wolf poster or the one of the solar system.
4. Russo is in room 3.
5. Pete, who taped a DJ poster to his door, isn't in room 1 or 6.
6. Kang's room is adjacent to both the room featuring the van Gogh print and Will's room.
7. Neither the student who put up the van Gogh print nor the one who displayed the rain forest photo is in room 1.
8. Josh doesn't have the van Gogh print on his door.
9. Hansen's room, which doesn't have a wolf poster on the door, is immediately west of Prince's room.
10. Dan, who didn't display the solar system poster or the van Gogh print, is in the room immediately west of Todd's.

Solution is on page 96.

See page 6 for directions on how to use the solving chart.

	Brown	Hans.	Kang	Mill.	Prince	Russ.	Corv.	DJ	rain	solar	van Gogh	wolf	1	2	3	4	5	6
Dan																		
Josh																		
Mike																		
Pete																		
Todd																		
Will																		
1																		
2																		
3																		
4																		
5																		
6																		
Corvette																		
DJ																		
rain for.																		
solar syst.																		
van Gogh																		
wolf																		

SUM 'EM UP

In these addition problems, a different letter of the alphabet has been substituted for each number from 0 to 9, and all the numbers from 0 to 9 have been used in each problem. To solve, determine the number value of each letter. The totals at the right and bottom of each problem indicate the sums of the numbers in those rows or columns. When the letters of each problem are arranged in order from 0 to 9, they will spell out a word.

Answers are on page 98.

1.

0	1	2	3	4	5	6	7	8	9		
Y				I					T	=	AI
	H			A				A		=	AL
		T		Y			N			=	AN
			R	S	S					=	BB
R	B	H	R	N	S	S	S	R	S	=	II
			Y	Y	I					=	AA
		S		T			I			=	BA
	N			H				A		=	AI
I				T					R	=	AN
=	=	=	=	=	=	=	=	=			
AB	AN	BR	AA	RS	BY	BL	N	BL			

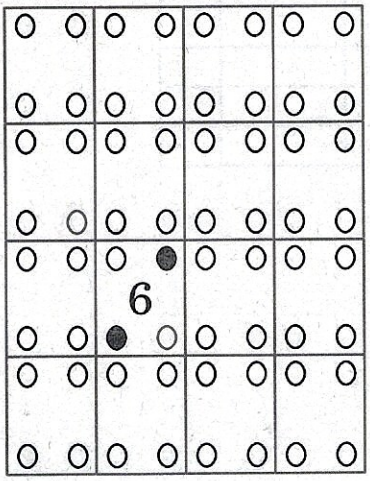
2.

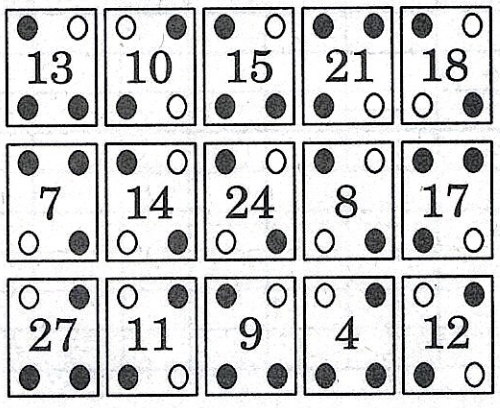
0	1	2	3	4	5	6	7	8	9		
K				A					C	=	ME
	R			J				E		=	UR
		B		M			U			=	J
			J	B	U					=	UL
R	J	E	J	C	A	C	J	E		=	RE
			A	R	B					=	UR
		M		M			J			=	UL
	E			E				K		=	UA
J				A					K	=	MM
=	=	=	=	=	=	=	=	=			
ML	UR	K	UK	EE	UU	UR	UK	MU			

SUM SPOTS

The idea of Sum Spots is to form a magic number square, in which the sums of the numbers in each row, column, and diagonal are the same, by placing numbered tiles into the squares of the diagram. In this puzzle, the sum is 54. Use each tile once and only once. HANDICAP: Each tile has a black or white dot in each corner. As a tile is placed next to another tile in the diagram, the dot patterns must match, black dots next to black dots and white dots next to white dots. These patterns must match on every side that touches another tile, but tiles that touch diagonally do not have to match. For example, the 4 tile could go the left of the 15 tile, since the 4 tile has black dots in its upper- and bottom-right corners and the 15 tile has black dots in its upper- and lower-left corners. However, the 4 tile could not go to the right of the 17 tile, since their black and white dots would not match. As you place each tile in the diagram, blacken in the appropriate dots in all corners. It is a good idea to cross off each tile as you use it.

Solution is on page 91.





LOGIC PROBLEM 18

FAMILY BIRTHDAYS

by Mary A. Powell

When newlyweds Josh and Grace held their first family get-together for their mothers and fathers, their siblings, and their brothers-in-law, they learned that all twelve family members have birthdays in different months. In fact, their Fourth of July party was only two days after one relative's birthday. All the married women use their husband's last name. From this information and the following clues, can you determine each person's full name and birthday?

1. All birthdays are within the first twelve days of the month; no two are on the same day.
2. No two people with the same last name have birthdays in consecutive months.
3. Mike's three children have birthdays in consecutive months; only two of Ellen's children have birthdays in consecutive months.
4. Josh's brother's birthday is three months before Grace's brother's birthday.
5. Both Howes have birthdays earlier in the year than either of the Hawkes.
6. Josh's birthday is one day earlier in the month than Fred's, which is one day earlier in the month than Barb's.
7. Josh's sister's birthday is eight months before Grace's sister's birthday.
8. Katy's birthday is on the 9th and Harold's is on the 11th.
9. There are five Crowes and three Dunnes.
10. Anne's birthday comes eight months earlier in the year than her husband's.
11. Lance's birthday comes five months earlier in the year than his father's.
12. Don's birthday is two days later in the month than his father's.
13. The September 10 birthday is not a woman's.
14. Ellen's birthday comes one day earlier in the month than her husband's and one month earlier in the year than Katy's.
15. Grace's birthday is six days later in the month than her mother's.
16. Cedric has two sons. Josh and Grace have no children, nieces, or nephews.

Solution is on page 96.

The fill-in chart below was found to be most helpful in solving this Logic Problem.

first name	last name	birth month	birth date

SENTENCE ARITHMETIC

Solve this puzzle as you would a Word Arithmetic (see directions for solving on page 15). Here, though, instead of forming a ten-letter word or words after you've solved the long-division problems, transfer the letters to the coded sentence. It's up to you to determine punctuation and word breaks. **Solution is on page 98.**

$\overline{F7}$ $\overline{B2}$ $\overline{C2}$ $\overline{A6}$ $\overline{E5}$ $\overline{D2}$ $\overline{B1}$ $\overline{C5}$ $\overline{F9}$ $\overline{A5}$ $\overline{E3}$ $\overline{D5}$ $\overline{A0}$ $\overline{E1}$ $\overline{B5}$ $\overline{E0}$ $\overline{C0}$ $\overline{E5}$ $\overline{A4}$ $\overline{D6}$ $\overline{F8}$ $\overline{C6}$ $\overline{B8}$ $\overline{A2}$ $\overline{E2}$

$\overline{B3}$ $\overline{C5}$ $\overline{D9}$ $\overline{A8}$ $\overline{D5}$ $\overline{D1}$ $\overline{B9}$ $\overline{E8}$ $\overline{A3}$ $\overline{C3}$ $\overline{E4}$ $\overline{B0}$ $\overline{F8}$ $\overline{D4}$ $\overline{E3}$ $\overline{C8}$ $\overline{A7}$ $\overline{B8}$ $\overline{F2}$ $\overline{D8}$ $\overline{B7}$ $\overline{A9}$ $\overline{C9}$ $\overline{F6}$ $\overline{E4}$

$\overline{D3}$ $\overline{B4}$ $\overline{C1}$ $\overline{F4}$ $\overline{E6}$ $\overline{B6}$ $\overline{D7}$ $\overline{F0}$ $\overline{A9}$ $\overline{E9}$ $\overline{C4}$ $\overline{F5}$ $\overline{D7}$ $\overline{B9}$ $\overline{D8}$ $\overline{C3}$ $\overline{A1}$ $\overline{F1}$ $\overline{D0}$ $\overline{E7}$ $\overline{A2}$ $\overline{C7}$ $\overline{F3}$ $\overline{B2}$

A.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          ONE
SOON | VISIONS
       ETSYO
         TOIN
       SOON
         NTYIS
       NOUUE
          OSER
```

B.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          FIT
HONE | FRESHEN
       RTRIO
         IUUHE
       FSRHE
          SIOON
       SFEFO
          UTN
```

C.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          ROW
REST | MYSTERY
       TOWMR
         EMSAR
       EYUUO
          MMMOY
       MTAYW
          EUW
```

D.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          LAD
MAIL | BABBLED
       BDIAL
         DBDIE
       DARDI
          MOED
       MAIL
          TTM
```

E.

_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          CAT
NECK | TRUCKER
       EONCC
         OKUOE
       CAAMA
          EKCCR
       RUTMT
          RKTA
```

F.

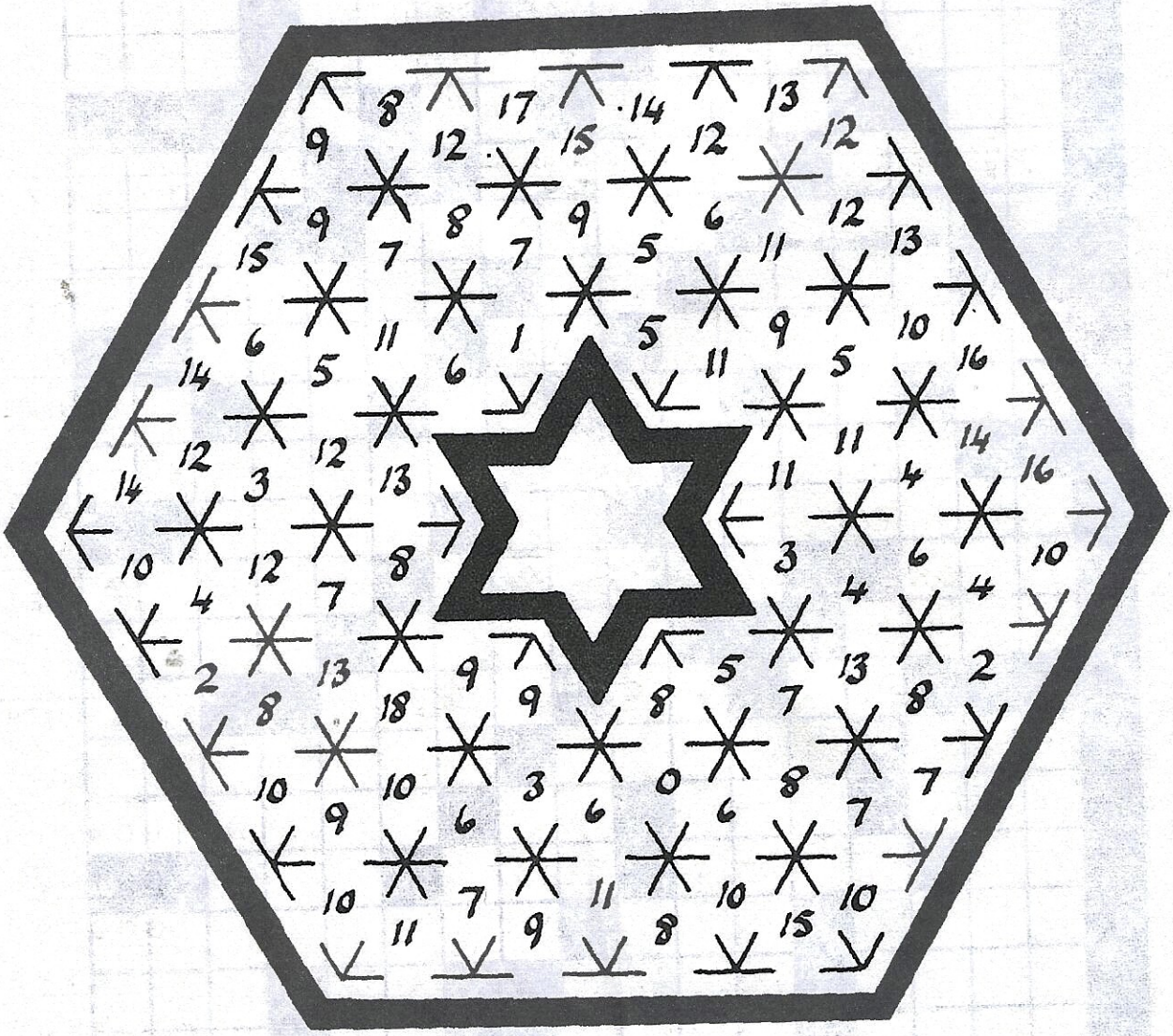
_ _ _ _ _ _ _ _ _ _
0 1 2 3 4 5 6 7 8 9

```
          GET
GOING | HOPPING
       GOING
         GOGFRN
       ERINE
          TRORG
       TFOOT
          FONI
```

TRIGONS 2

See page 72 for solving directions.

								233	333	334								
						222	223	224	234	244	344	444						
						123	133	134	225	235	335	345						
					122	114	124	125	144	226	245	336	445					
				112	113	033	115	116	135	145	236	255	355	455				
			111	022	023	024	034	044	126	136	155	246	346	446	555			
		011	012	013	014	015	025	035	045	055	146	156	256	356	456	556		
000	001	002	003	004	005	006	016	026	036	046	056	066	166	266	366	466	566	666
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**



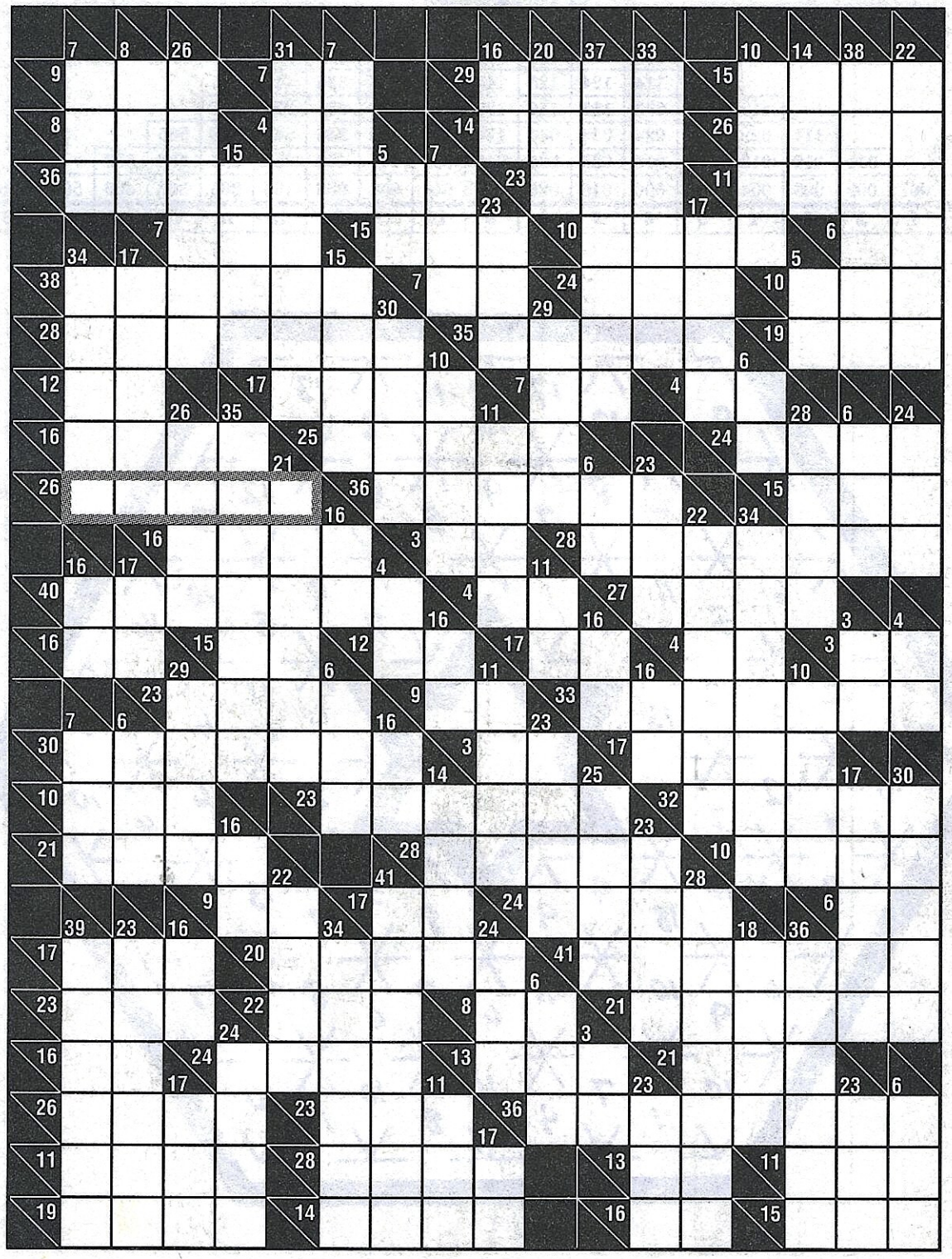
Solution is on page 91

CROSS SUMS

Here are two jumbo Cross Sums for all of you who can't get enough of these favorites. Complete solving directions are on page 8, and if you need help starting a puzzle, the digit combination to go its outlined area is listed on page 98.

Solutions are on page 88.

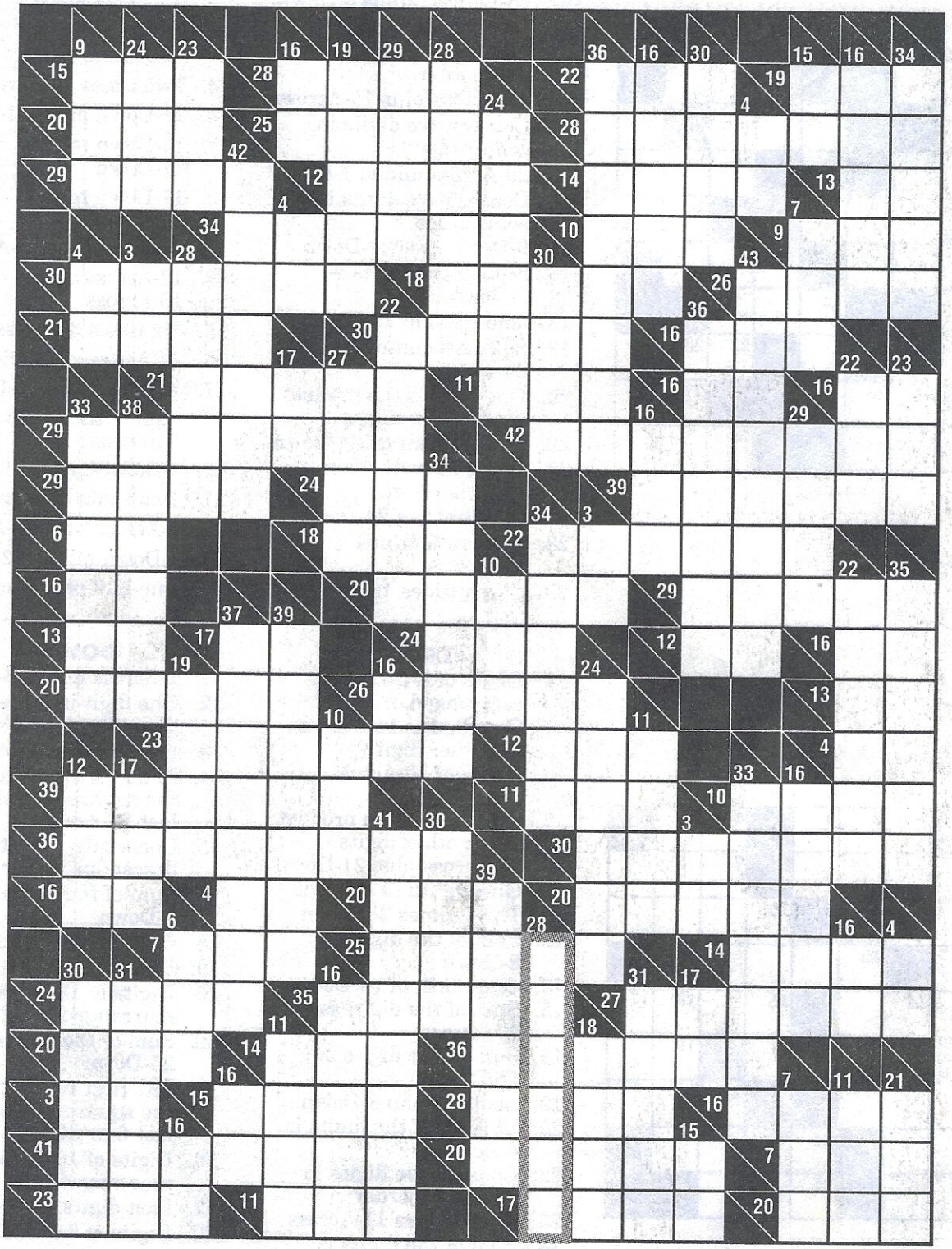
29.



CROSS SUMS

Solution is on page 88.

30.



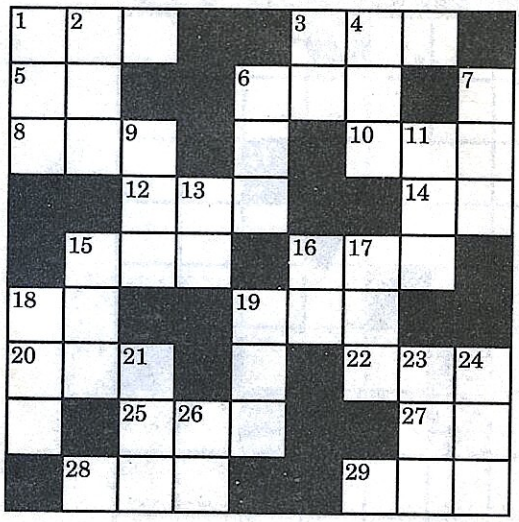
Add more to your total puzzle enjoyment with ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 21.*

FIGURE LOGICS 12 & 13

by Linda Thistle

Directions for solving Figure Logics are on page 5.

Starting helps are on page 98.

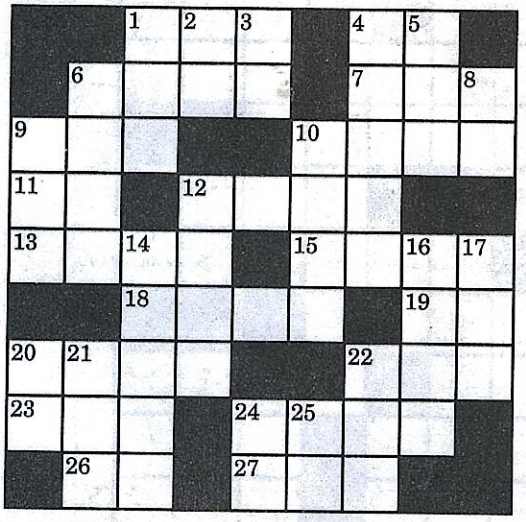


ACROSS

1. One digit is the sum of the other digits
3. 28-Across minus 6-Down
5. One-third of 13-Down
6. Consecutive digits in some order
8. 12-Across plus 15-Across
10. Consecutive digits in some order
12. 29-Across minus 1-Down
14. Consecutive digits in some order
15. 9-Down plus 24-Down
16. Sum of the digits is 3-Down
18. One-third of 19-Down
19. 20-Across minus 24-Down
20. One digit is the product of the other digits
22. 8-Across minus 24-Down
25. One digit is the sum of the other digits
27. One-tenth of 24-Down
28. 16-Across minus 27-Across
29. Seven times 16-Down

DOWN

1. 2-Down minus 29-Across
2. One digit is the sum of the other digits
3. One-seventh of 18-Across
4. Two times 10-Across
6. 18-Down minus 1-Across
7. 18-Down minus 11-Down
9. 17-Down minus 21-Down
11. 3-Across plus 19-Across
13. 12-Across minus 18-Across
15. Six times 3-Across
16. 27-Across plus 26-Down
17. 1-Across plus 11-Down
18. Sum of the digits is 5-Across
19. 7-Down minus 21-Down
21. Two times 12-Across
23. 6-Across plus 19-Across
24. 6-Down minus 12-Across
26. One-half of 14-Across



ACROSS

1. Digits of 5-Down rearranged
4. One digit is two times the other digit
6. Digits of 20-Across rearranged
7. One digit is the product of the other digits
9. 22-Across plus 21-Down
10. One-eighth of 4-Down
11. Three times 25-Down
12. Sum of the digits is 8-Down
13. One-ninth of 14-Down
15. Sum of the digits is 26-Across
18. Sum of the digits is 24-Down
19. Six less than 8-Down
20. Product of the digits is 4-Across
22. Consecutive digits in ascending order
23. Three times 11-Across
24. Sum of the digits is 20-Down
26. One digit is four times the other digit
27. 22-Down minus 23-Across

DOWN

1. 1-Across minus 8-Down
2. One digit is three times the other digit
3. One-third of 4-Across
4. The first two digits form the square root of the last four digits
5. Consecutive digits in descending order
6. Sum of the digits is 3-Down
8. One-sixth of 1-Across
9. Last digits of 18-Across
10. Digits of 13-Across rearranged
12. Sum of the digits is 25-Down
14. The first two digits form the square root of the last four digits
16. Digits of 10-Across rearranged
17. Last digits of 12-Across
20. Digits of 3-Down reversed
21. Two more than 17-Down
22. Same digit repeated
24. 2-Down minus 26-Across
25. 19-Across plus 26-Across

Solutions are on page 89

NUMBER PLACE CHALLENGER

by Walter Mackey

Place a number into every box so that each row across, each column down, each small 16-box square, and each of the two long diagonals (circled) will contain each number from 1 to 16. No number may appear more than once in any row across, in any column down, on either diagonal, or within any small 16-box square.

Solution is on page 90.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

○		12	7	3				2			8	6		1	○
	○		1			11	14			15				○	9
15	11	○			2		1		6	3		10	○		4
5		9	○	12	8				7			○	15	2	
		14		○		1	16	15	12		○	3			11
3	10			13	○	2			14	○	4			5	
	16					○	7	5	○			4	13		8
	12		6	8	4		○	○	10	1		14		15	7
	5			14	3		○	○		10	6		11	13	
	2		4		9	○	6		○	8	16				14
		1			○	7	2	9	3	○		15			12
9	3	10		○		12		11			○	16	7		
12			○		10				13	14		○		16	3
13		○	5	2	6	4		1					○	14	
	○	11	16	9			12		2		10	8	5	○	
○	7	8			16	15		4			9	2	6		○

CROSSMATH

This looks like a crossword, but it involves numbers, not words. The numbers given in the clues columns are the answers to simple math problems; the numbers you enter into the diagram will form the problems which result in those answers. All the arithmetic symbols (+, −, x, ÷) have already been entered into the appropriate squares in the diagram. Use the symbols, the crossing numbers, and a bit of logic to determine the digit to enter into each blank square (one digit per square). An important thing to remember: The arithmetic is to be done in the order in which it reads, from left to right or top to bottom — for example, 1 + 2 x 3 equals 9 (1 + 2 = 3; 3 x 3 = 9). If done in any other order, your solution won't work. Arithmetic signs at the beginning or end of a problem (as in 19-Across) should be ignored. You will never use zero as the first digit of a number, though there may be zeroes used as later digits. There are no negative numbers used here; nor are there any fractions used. If you need help getting started, you'll find the correct entry for 1-Down on page 98. **Solution is on page 91.**

ACROSS

1. 57
4. 73
8. 55
11. 588
13. 80
15. 15
17. 70
18. 234
19. 16
20. 14
22. 12
24. 995
25. 1
26. 3
27. 14
28. 18
30. 96
32. 17
33. 36
35. 35
37. 999
39. 1
40. 83
42. 5
43. 18
44. 44
45. 1
47. 21
48. 740
50. 85
52. 94
53. 42
55. 204
57. 57
58. 24
59. 45
60. 42
61. 55
62. 234
63. 81

DOWN

1. 23
2. 6
3. 76
4. 693
5. 52
6. 5
7. 240
8. 100
9. 11
10. 48
12. 14
14. 520
16. 6
21. 122
23. 2
25. 48
27. 1214
28. 16
29. 2
31. 3
33. 11
34. 207
35. 2
36. 654
38. 66
41. 3
44. 9
46. 436
47. 34
48. 608
49. 344
50. 9
51. 24
52. 52
54. 30
56. 6

1 6	2 3	−	3 6	■	4 6	5 5	6 7	÷	7 9	■	8 5	9 7	−	10 2
11 6	x	12 9	8	■	13 9		−	14 1		■	15 9	+	16 6	+
17 7	4	−	4	■	18	+	2			■	+	19 4	x	4
÷	20		÷	21	−		■	22	x	23	4	÷	1	6
24 2		+	9			■	25 8	÷	4	−	1	■	■	■
26 9	÷	3	■	+	■	27	x		÷		■	28	x	29
■	30	x	31		■	32 1	6	+	1	■	33 6	x	34 6	−
35			−		36		■	37		38	+			
÷	39	−		■	40	+	41		■	42	5	÷		■
43	x		■	44	x		−		■	+	■	45	−	46
■	■	■	47	+		+		■	48 6		49	+		
50 2	51	+	4		−		■	52 9	+		+			+
53 7	x	54 6	−	■	55 1	9	56 8	+	6	■	57 3	+	5	4
÷	58	x		■	59 8	5	−	4	0	■	60 4	2	÷	1
61 3	+	5	0	■	62 2	+	2	3	2	■	63	x		

FIGURE LOGIC 14

CHALLENGER

by Linda Thistle

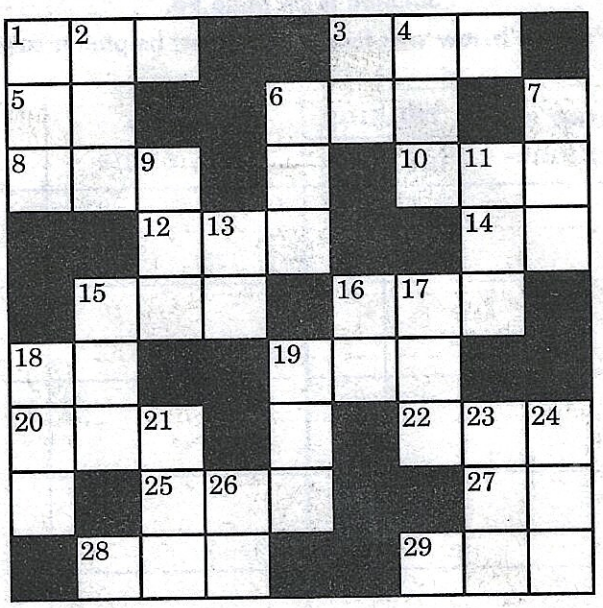
Directions for solving Figure Logics are on page 5.
Starting help is on page 98.

ACROSS

The sum of the digits of each Across answer is 3-Down.

DOWN

1. 6-Down minus 29-Across
2. Three more than 12-Across plus 15-Across
3. One-third of 13-Down
4. Two less than 28-Across
6. Two more than 22-Across
7. Sixty less than 8-Across
9. One less than 25-Across
11. Sum of its digits is 3-Down
13. Consecutive digits in some order
15. Three less than 16-Across
16. Two less than 5-Across
17. Five times 3-Across
18. Average of 6-Across and 17-Down
19. 10-Across minus 18-Down
21. 5-Across plus 7-Down
23. 1-Across plus 19-Down
24. Six less than 20-Across
26. 18-Down minus 25-Across



Solution is on page 89

LOGIC PROBLEM 19

CHALLENGER

THE CHALLENGERS

by Margaret Edmiston

Each year at Montgomery High School, the ten members of the girls' tennis team participate in midseason players' challenges. Any team member may challenge a higher-ranked player on the team to a match, provided that the challenged player is within three spots (for example, the 7th ranked player could challenge the 6th, 5th, or 4th ranked player). If the challenger wins, then she and the defeated player exchange rankings; if the challenger loses, the two players retain their pre-match positions. Last midseason, five challenge matches were played by the ten team members (one of whom is Ms. Rainey). Each girl, including Francine, played exactly one match. From this information and the clues below, can you determine each girl's full name and pre-match and post-match ranking, as well as her opponent?

1. There was only one match in which a defending player was beaten by a player ranked three spots below her.
2. Ms. Young challenged Mae, who was more than one rank above her, and lost.
3. The 6th ranked player challenged Dahlia and won.
4. Both Georgette Weaver and King lost to a challenger one rank below; Georgette lost to White.
5. The same player was ranked 2nd both before and after the challenge matches.
6. Petunia played Carver.
7. After winning her match, Yvette was ranked just above McNair, who was not her opponent.
8. After her match, Esther moved down one rank and ended up directly above Hall.
9. Angela, who was ranked in the top five all season, defeated challenger Drake.
10. Turner beat challenger Juliette; both were ranked in the bottom five before their match.
11. The same three women were ranked 8th, 9th, and 10th before and after the challenge rounds, but not necessarily in the same order.
12. Neither the player ranked 7th nor the one ranked 8th was a challenger.
13. Portia isn't McNair.

Solution is on page 96.

The match results chart shown below was found to be most helpful in solving this Logic Problem.

winner's first name	winner's last name	ranking		loser's first name	loser's last name	ranking	
		bef.	aft.			bef.	aft.

FIGURE LOGIC 15
CHALLENGER

by Linda Thistle

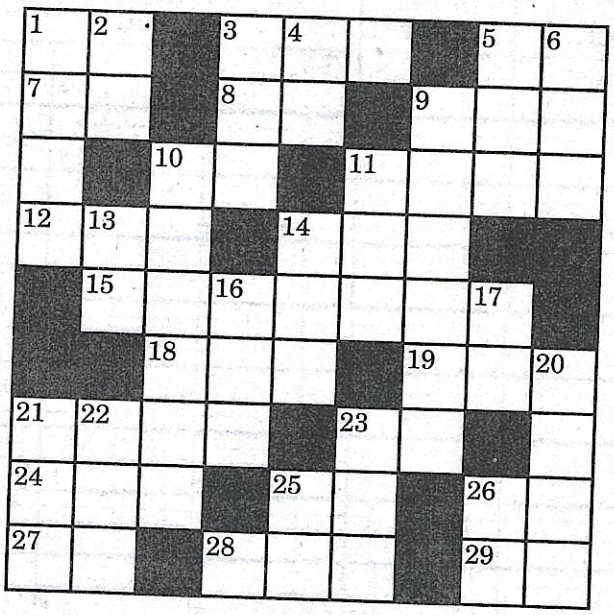
Directions for solving Figure Logics are on page 5.
NOTE: Each letter used in the clues below represents a different digit from 1 to 9.
Starting help is on page 98.

ACROSS

1. 10-Across minus H
3. 25-Across times R
5. 25-Across minus A
7. A times R
8. 17-Down divided by T
9. One hundred less than 28-Across
10. 26-Down divided by T
11. 28-Across times U
12. 13-Down times O
14. 26-Down times H
15. Its digits spell QUARTER
18. 27-Across times E
19. 5-Down plus 11-Down
21. 1-Down plus 20-Down
23. 13-Down plus U
24. 1-Across plus 12-Across
25. 27-Across minus 2-Down
26. 2-Down times F
27. 7-Across plus 13-Down
28. Digits of 6-Down rearranged
29. 1-Across times A

DOWN

1. Sum of its digits is E
2. 4-Down plus O
3. Sum of its digits is R
4. E times T
5. 21-Down plus F
6. 12-Across plus 23-Down
9. 10-Down times F
10. Its digits spell FOURTH
11. 18-Across plus A
13. Digits of 8-Across reversed
14. 9-Across plus 10-Across
16. 14-Across minus U
17. 13-Down plus Q
20. Sum of its digits is H
21. 12-Across minus 7-Across
22. 14-Down plus T
23. 1-Across times 25-Down
25. 5-Across plus O
26. 29-Across plus Q



Solution is on page 89

LOGIC PROBLEM 20

CHALLENGER

PRIME TIME

by Kevyn Dymond

The Xi Iota Beta math fraternity at the State University mints its own coins (based on the "xib" monetary unit) for use as prize money in various fraternity-sponsored math and logic competitions. Their coins come in five different prime number denominations: 2 xibs, 3 xibs, 5 xibs, 7 xibs, and 11 xibs. Furthermore, each type of coin is struck from a different kind of metal (in no particular order: aluminum, brass, copper, steel, and tin). At a recent open house, the Xis hosted ten math-loving high-school seniors (one was Louise) from ten different local schools (including Zephyrwood High). As part of the activities, the Xis put three different xib coins into each of ten coin purses (each purse was a different color; one was maroon). Each purse contained three different kinds of metal and each purse contained a unique trio of coin types. Each of these ten purses was then distributed to one of the ten high school seniors. Based on the information above and the clues below, can you determine each student's high school, purse color, the three kinds of metal coins it contained, and its total?

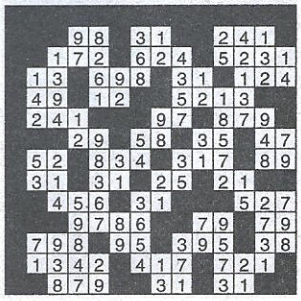
1. The dark blue purse contained more total xibs than Herbie's purse, which contained more total xibs than the light blue purse, which contained more total xibs than the purse given to the Vistawood High student; at least one type of coin is common to all four purses.
2. Freddy attends Quillwood High.
3. Gloria's purse contained more total xibs than the green purse (which contained a brass coin).
4. Isabel's purse (which did not contain a steel coin) contained more total xibs than the purse given to the Underwood High student, which contained more total xibs than the yellow purse.
5. The the total xibs in the Westwood High student's purse (which did not contain a copper coin) was five xibs less than the Pinewood High student's purse total; neither purse contained a tin coin.
6. The pink purse contained two-thirds as many total xibs as Kendra's purse.
7. The two purses containing the most and least total xibs were, in some order, the Youngwood High student's purse and the orange purse (neither of which were given to Ed).
8. The purse given to Denise (which contained an odd total of xibs) contained two fewer xibs than the red purse.
9. The purse given to the Olivewood High student contained fewer total xibs than the white purse.
10. Jeremy's purse (which did not contain an aluminum coin) contained a total of three xibs less than the Ridgewood High student's purse total; neither purse contained a steel coin.
11. The violet purse (which wasn't given to the Northwood High student) contained more total xibs than Martin's purse; neither purse contained a brass coin.

Solution is on page 97.

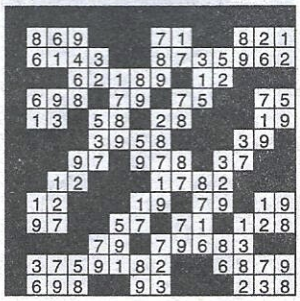
The fill-in chart below was found to be most helpful in solving this Logic Problem.

first name	high school	purse color	metals/ coins			total xibs
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=
			+	+		=

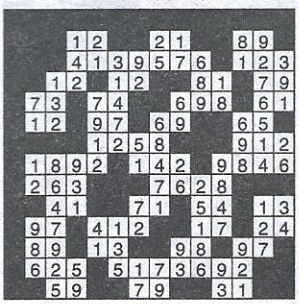
CROSS SUMS 1



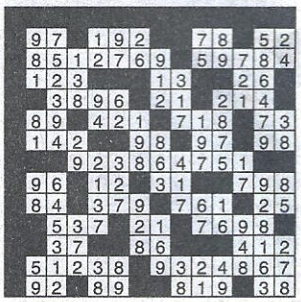
CROSS SUMS 2



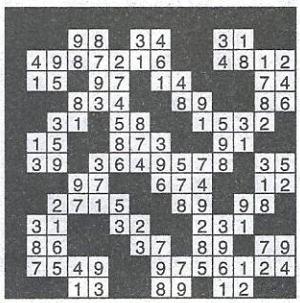
CROSS SUMS 3



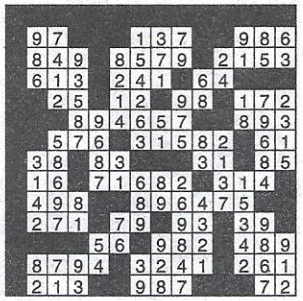
CROSS SUMS 4



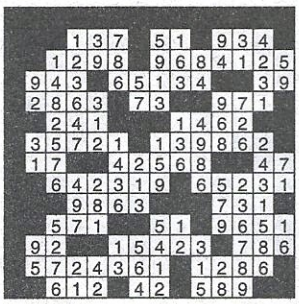
CROSS SUMS 5



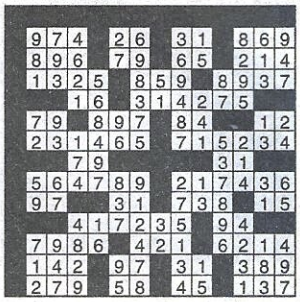
CROSS SUMS 6



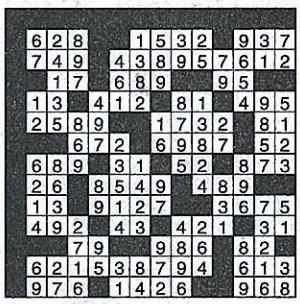
CROSS SUMS 7



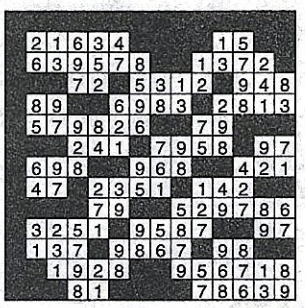
CROSS SUMS 8



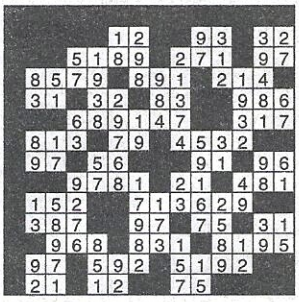
CROSS SUMS 9



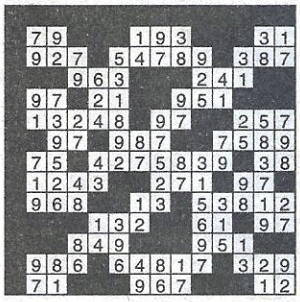
CROSS SUMS 10



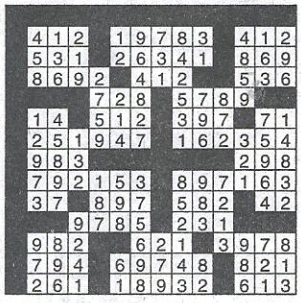
CROSS SUMS 11



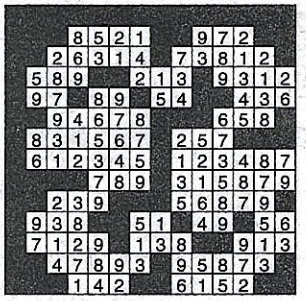
CROSS SUMS 12



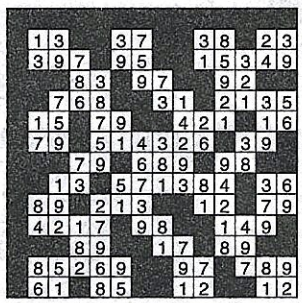
CROSS SUMS 13



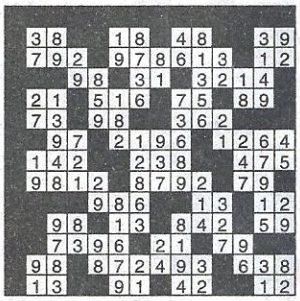
CROSS SUMS 14



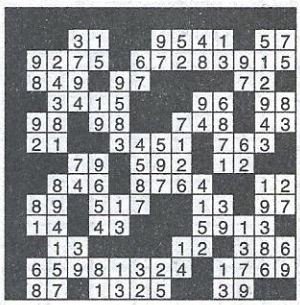
CROSS SUMS 15



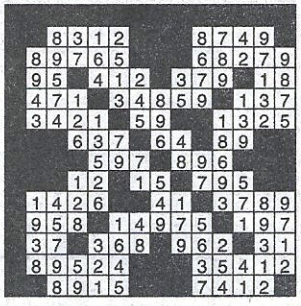
CROSS SUMS 16



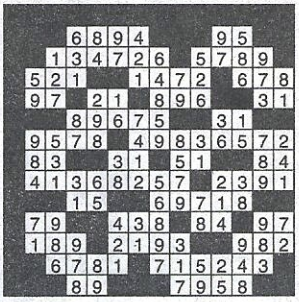
CROSS SUMS 17



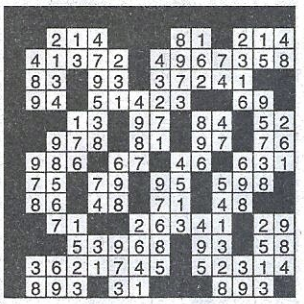
CROSS SUMS 18



CROSS SUMS 19



CROSS SUMS 20



CROSS SUMS 21

5	1	8	7	2	3	4		3	8	9	7	4
6	2	7	9	5	1	3		2	1	7	6	3
8	6	9		7	9		3	1	4		5	1
9	5		9	1	4	2	7	5		1	4	2
7	4	5	1	3		1	2		9	4	8	6
		1	3		8	4	5	1	6	2	3	7
8	9		2	1	3		1	2	4		9	5
3	6	9	7	2	1	8	4		1	3		
2	4	8	5		7	9		1	2	8	9	5
6	8	7		1	4	6	3	2	5		3	1
1	3		7	4	2		9	6		1	7	2
4	5	1	2	6		1	6	3	7	2	5	4
5	7	3	1	8		2	7	4	9	3	8	6

CROSS SUMS 22

6	7	2	1		3	1	2	4		2	8	6
9	8	3	7		7	8	5	9		4	9	7
	2	1		5	6				6	1	5	
4	9	5	8	7		8	6	3	9		6	8
1	3		3	1		7	2	1	8		7	9
2	6		7	6	8	9				8	4	7
		1	9	2	4		7	8	4	9		
4	6	3				9	1	2	3		4	8
1	3		8	1	3	6		4	1		7	9
2	4		9	5	7	8		1	2	3	5	6
	1	3	7				4	5		9	8	
9	5	8		9	6	8	7		2	4	6	1
3	2	1		2	1	5	3		8	7	9	3

CROSS SUMS 23

7	9	8		9	4		9	5	8		3	9
3	8	6		7	8	9	3	1	6		8	7
		5	3		3	8	1		9	3	6	8
3	6	2	1		1	2			5	1		
1	2			9	6	7	8	2			9	7
9	8	3		6	2		9	6	1	8	3	2
		9	5	8	7			3	2	5	1	
8	7	2	9	4	1		8	4		7	2	1
3	1			8	2	3	4	1			8	9
		9	5			8	9		9	8	4	7
4	2	7	1		9	2	7		7	5		
8	1		4	9	7	1	2	3		2	3	1
2	3		2	6	1		5	1		4	9	6

CROSS SUMS 24

	1	2		3	1		7	9		9	1	
2	3	1		1	2		1	5	3	7	8	9
5	4	3		2	6	1	3		1	4	2	7
	5	8	9	6	7	3		4	8			
3	8		8	4	9		4	2	6	1	5	3
1	2	4		5	3		6	1	7	4	8	9
		9	7					9	8			
5	2	6	1	4	3		2	8		3	1	5
9	5	8	3	7	6		3	6	2		3	1
		5	9		8	7	9	5	6	4		
1	4	6	2		8	9	6	7		8	6	9
3	1	8	4	2	7		1	2		9	5	7
	7	9		3	6		5	1		1	2	

CROSS SUMS 25

		2	6		7	1	8			9	8	6
3	1	4		8	2	9	3		1	6	4	2
8	4	7	2	9	3		2	9	3	8		
		8	1	5			1	7			9	8
	7	9			1	3			1	2	3	5
1	3			1	2	8	7	5	3	4	6	
2	4		6	2	3		9	8	2		8	7
	1	2	8	4	5	7	6	3			5	9
8	2	7	9			9	8			3	7	
9	6			1	8			7	9	2		
		8	6	3	9		6	4	8	5	9	7
1	3	7	2		7	2	1	8		6	8	9
5	8	9				8	3	9		1	3	

CROSS SUMS 26

2	4	3	1	7	5		3	1	6	4	5	2
1	5	4	3	8	9		1	2	9	8	6	5
	6	8	7	9				3	9	7	1	
3	1		2	5	7		6	9	8		9	3
8	7	3	9		6	9	2	7	1	4	8	
9	8	7		2	1	7	3		2	1		
6	9	2		4	9	8	7	6		6	7	8
		9	7		2	4	1	5		3	6	9
	9	1	4	7	3	6	5		9	2	5	6
1	2		3	9	5		9	3	6		1	3
9	5	2	1					7	8	9	4	
7	8	6	5	9	2		7	2	5	8	3	9
4	6	3	2	7	1		6	1	4	3	2	7

CROSS SUMS 27

2	1	7	3	5		3	1		4	9	8	7
7	5	9	8	4		7	9	4	2	8	6	3
9	8		9	6	8		7	2	1	6	3	4
6	2			2	6	4	3	1		5	7	2
8	4		5	1	9	8			5	7	4	1
5	3	9	6		7	9		9	1		1	5
		8	4	3				4	2	1		
8	9		2	1		1	3		4	7	5	1
5	8	9	7			5	9	8	7		1	3
3	7	8		1	2	3	8	4			9	7
1	3	6	2	9	5		6	9	8	7	5	
2	6	4	8	7	3	9		6	9	8	7	5
4	5	7	9		1	4		3	1	6	4	2

CROSS SUMS 28

	1	2		4	3		4	6		7	6	
	8	9		5	1		3	8	7	5	9	2
1	2			9	7		2	4		8	7	
7	4		8	4		2	9	3		2	4	
3	9	1	2	8	4		3	1	4	5		
	3	6		6	3	7	4	2	8	9	5	
8	9			1	5	4				7	4	
3	7	8	4	5	9	2	1		3	1		
	1	3	6	7		2	1	8	7	3	4	
7	5		7	8	9		5	9		2	8	
3	1		7	9		7	9			1	3	
6	9	3	1	8	5		1	3		9	8	
	3	2		4	2		5	7		7	6	

CROSS SUMS 29

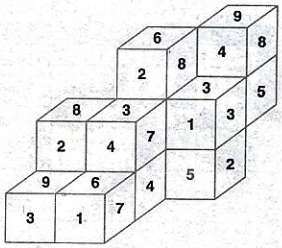
4	2	3		5	2		9	7	8	5	3	1	7	4
2	1	5		3	1		7	4	1	2	4	8	9	5
1	5	8	6	7	4	3	2		9	6	8		1	5	3	2
		2	1	4		2	4	9		4	3	1	2		5	1
8	6	7	5	9	3		1	6		7	9	8		1	6	3
4	5	1	3	2	7	6			8	7	9	6	5		4	8	7
9	3			1	4	9	3		5	2		3	1			
6	1	7	2		1	8	2	5	9				5	8	2	9
7	2	9	5	3		7	4	3	8	5	9			6	1	8
	4	1	2	9		1	2		1	6	2	4	5	3	7	
9	8	6	4	5	7	1		1	3		8	3	7	9		
7	9		9	6		3	9		8	9		1	3		2	1
	9	8	4	2		7	2		7	9	5	6	2	1	3	
4	2	5	6	1	3	9		1	2		7	4	5	1		
2	1	7			1	7	2	3	6	4		7	8	3	5	9
1	3	8	9				3	5	7	9	4		1	4	2	3
		7	2		9	8		8	7	6	3				1	5
6	4	7		3	2	5	1	9		5	8	2	4	9	6	7
8	6	9		9	7	6		7	1		5	1	2	4	3	6
9	7		7	8	5	4		8	3	2		6	7	8		
7	2	8	9		9	8	6		2	1	6	4	5	7	8	3
5	1	2	3		8	7	4	9			8	5		3	6	2
4	3	7	5		3	2	1	8			9	7		5	9	1

NUMBER FILL-IN

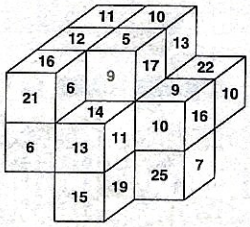
4	7	10	13	16		27	31	35	39	43	47	51	55	59
9		15				30			45			52		70
14		20		21	27	33	39	45	51			53		81
19	22	25	28	31			49		57		35	54	73	92
				41	47	53	59		63		55		83	
27	33	39	45	51			69				75		93	
30		43					79	83	87	91	95	99	103	107
33		47	53	59	65			90						117
36		51			77			97	102	107	112	117	122	127
39	47	55	63	71	79	87						123		
	49		69			97			124			129		151
48	51		75		100	107	114	121	128	135		135		155
52			81		105		120		132			141		159
56			87		110		126		136			147		163
60	71	82	93	104	115		132	136	140		146	153	160	167

ON THE SURFACE

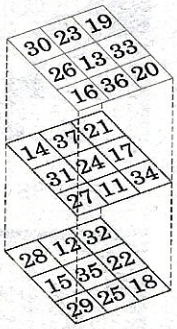
1.



2.



THREE-LAYER MAGIC



The magic number is 72.

GO FIGURE!

	2	9	1
5	8	7	6
3	1	5	7
8	6	3	

SUM LOGIC 1

33	3	46	2	6
5	23	1	15	46
17	4	14	48	7
1	21	23	17	28
34	39	6	8	3

SUM LOGIC 2

32	40	-39	4	-1
-4	17	21	13	-11
13	-41	15	44	5
7	21	-3	-30	41
-12	-1	42	5	2

SQUARE LOGIC 1

16	24	13	2	10
7	15	4	18	21
5	8	22	11	19
23	1	20	9	12
14	17	6	25	3

SQUARE LOGIC 2

36	2	3	4	35	31
12	29	27	10	26	7
13	17	22	21	14	24
19	20	16	15	23	18
25	11	9	28	8	30
6	32	34	33	5	1

CROSS SUMS 30

1	8	6		9	5	8	6			7	6	9		9	2	8
3	9	8		7	2	9	4	3		5	2	7	1	6	3	4
5	7	9	8		1	5	2	4		2	1	8	3		4	9
		6	1	3	7	8	9		1	3	6		2	1	6	
1	2	9	7	3	8		1	2	8	3	4		9	4	6	7
3	1	8	9			3	7	5	9	6		7	8	1		
	1	3	9	6	2		1	6	4		9	7		7	9	
2	6	3	4	8	5	1			7	8	4	2	1	5	9	6
9	8	7	5		9	7	8			7	4	5	9	6	8	
1	5			7	5	6		4	2	5	1	3	7			
7	9				4	7	2	6	1		5	6	8	3	7	
6	7		9	8		9	7	8			8	4		7	9	
8	3	1	2	6		9	3	1	5	8					5	8
		6	3	4	2	7	1		9	1	2				1	3
4	6	8	7	9	5				2	6	3		3	1	4	2
1	2	4	5	7	3	6	8			4	5	1	9	3	2	6
7	9		1	3		3	9	8		3	1	2	8	6		
		1	4	2		1	6	7	9	2			2	4	7	1
9	7	2	6		6	5	7	9	8		4	8	1	2	9	3
8	9	3		3	2	9		4	2	7	8	9	6			
2	1		7	5	1	2		6	5	8	9		4	1	3	8
5	6	7	9	2	4	8		5	1	2	3	9		2	1	4
6	8	9		1	3	7			3	1	7	6		4	7	9

FIGURE LOGIC 1

	3	1	7		2	0
3	5		4	6	3	
2	4	3		2		1
7		2		8	7	1
	3	8	5		1	7
9	4		1	0	9	

FIGURE LOGIC 2

	3	6	1		1	6	9	
7	2		9	6	3		9	1
4				3				0
9	6		8	6	1		1	0
	9	8	1		4	1	6	
8	5		6	5	0		3	6
6				2				7
4	5		1	5	1		2	6
	2	2	5		4	0	0	

FIGURE LOGIC 3

1	6	1		5	0	7	3	
0		5	6	1		5	1	3
2	3		7	7			5	7
	4	5		5	1			2
3	5	0	4		1	8	6	0
8			1	9		9	0	
6	2				1	6	4	3
4	8	3			8	8	9	6
	5	1	3	0		1	2	0

FIGURE LOGIC 4

7	5	2		3		6	4	8
3		3	2	1	8	9		6
1	7		3	7	6		2	4
	6	5	4		2	9	1	
3	2	7				1	0	4
	4	6	5		1	4	5	
4	5		3	2	9		9	4
0		1	8	3	0	7		3
4	1	9		1		1	0	2

FIGURE LOGIC 5

	1	5	9		6	9	3	
4	8		1	2	0		3	
5	3	4	6		1	5	4	0
7		8	2	5			6	
2	2		1	6	3		2	8
	3			1	7	6		9
1	1	4	4		4	8	5	1
4		9	5	7		6	3	
3	8	5		7	0	4		

FIGURE LOGIC 6

2	2	4	2		2	7	2	9
6	4	0	9	6		1	2	3
7	0			1	3		4	5
6		1	2	1	1		1	1
	4	6	2		1	8	5	
2	1		2	2	7	9		3
7	6		4	4			1	4
4	8	3		6	3	9	6	9
1	1	2	1		7	3	1	0

FIGURE LOGIC 7

3	5	2				1	3	5
4	9	0	7		3	6	8	1
3	1		5	0	3		1	3
	1	3	3		3	4	2	
		0				0		
	6	8	5		3	9	9	
8	2		7	0	1		1	4
2	4	6	4		2	5	1	5
6	8	1				2	2	7

FIGURE LOGIC 9

	5	1	4		8	1	6	
2	8		6	1	2	7		9
6	1	8		0		2	2	4
		3	3		1	7	0	
1	7		8	0	9		4	8
	1	1	2		1	4		
3	8	1		1		4	5	6
6		2	4	2	7		1	1
	1	7	2		2	0	6	

FIGURE LOGIC 10

	1	7	4		1	4	7	
2		5	5	5	5	5		1
4	8	0		3		6	3	9
6	8		3	2	1		3	8
	8	7	1		1	2	3	
9	8		4	2	0		3	2
2	8	8		3		8	3	8
4		1	1	1	1	1		2
	4	7	3		8	4	0	

FIGURE LOGIC 11

1	1		4		5	2	9	
8	1		9	2	8		6	
2	4	3		5	6		1	8
		1	4	5		2		7
2	9	3	0		3	4	6	0
3		6		9	1	0		
1	4		6	3		1	7	4
	3		6	9	2		2	1
	3	2	4		3		5	1

FIGURE LOGIC 12

3	8	5			1	4	7	
2	1			5	4	6		6
9	9	4		8		2	3	1
		1	6	1			5	6
	8	3	3		7	7	0	
9	8			2	0	3		
6	2	3		9		5	7	4
6		2	2	4			4	2
	7	2	8			4	9	0

FIGURE LOGIC 13

		1	3	2		6	3	
	7	1	9	1		4	2	2
9	6	0			8	0	1	2
9	0		6	1	6	9		
5	8	5	6		5	6	2	1
		2	9	9	5		1	6
1	1	7	9			7	8	9
2	7	0		2	3	7	0	
	1	4		5	0	7		

FIGURE LOGIC 14

3	9	3			1	9	5	
6	9			5	5	5		2
2	6	7		4		8	7	0
		3	4	8			8	7
	6	4	5		6	9	0	
7	8			1	7	7		
6	7	2		0		5	4	6
5		7	3	5			9	6
	9	6	0			1	8	6

FIGURE LOGIC 15

1	3		1	2	4		2	6
2	0		1	4		5	2	6
3		2	2		4	3	8	2
2	4	6		5	9	4		
	1	7	5	4	3	8	4	
		4	8	8		7	2	1
2	5	3	7		4	8		3
2	5	9		3	1		6	0
6	1		6	2	6		6	5

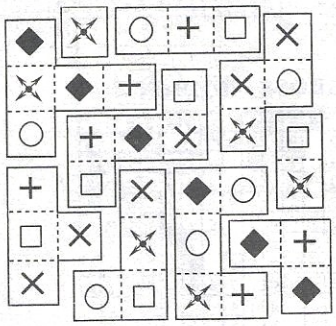
SECRET SQUARES

28	11	17	35
15	37	19	20
42	31	4	14
6	12	51	22

FIGURE LOGIC 8

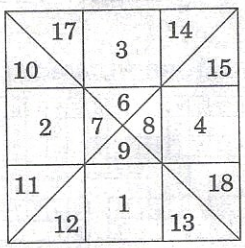
2	1	7	8		3	1			3	7		1	2	1
3	4	2	1		2	0		1	6	9		8	4	3
1	3		8	0		9	4	4		2	6		3	3
		2	4			9	0	8	1		6	1	1	1
3	1	1		8	1		9	8	0	1		0		
9	1		3	7	7	4		8	8	1			2	7
	1	4	8	1	0	4		9	9		1	7	2	8
		4	3	2						4	4	8		
7	2	1	5		6	5		1	6	1	0	5	1	
5	5			1	5	7		6	7	4	4		9	7
		2		5	6	4	9		9	0		2	6	9
4	3	3	4		1	2	9	6			5	9		
3	4		6	9		3	9	4		7	4		4	3
2	8	1		6	6	6		7	6		9	5	2	2
1	1	7		1	4			8	2		5	1	8	4

JIGSAW LOGIC



Your solution may be an upside-down version of this.

TRIANGULAR SQUARE



OUT AND AROUND

LETTER PLACE

1.

E	O	L	D	Z	C	V	A	I
C	I	V	A	L	O	Z	D	E
Z	A	D	I	V	E	O	L	C
O	D	C	V	E	Z	L	I	A
I	L	Z	O	A	D	E	C	V
V	E	A	C	I	L	D	O	Z
A	Z	E	L	O	I	C	V	D
D	V	O	E	C	A	I	Z	L
L	C	I	Z	D	V	A	E	O

2.

S	D	C	M	P	I	R	E	O
E	R	P	O	S	D	C	I	M
O	I	M	C	R	E	D	P	S
R	P	S	I	C	M	E	O	D
C	M	D	R	E	O	P	S	I
I	E	O	S	D	P	M	C	R
D	S	R	P	I	C	O	M	E
M	C	I	E	O	R	S	D	P
P	O	E	D	M	S	I	R	C

3.

V	D	U	I	A	E	R	L	N
L	N	A	R	U	D	V	E	I
R	I	E	V	L	N	U	A	D
A	R	V	U	N	L	I	D	E
N	U	I	E	D	V	A	R	L
D	E	L	A	I	R	N	U	V
E	A	R	D	V	I	L	N	U
U	V	N	L	E	A	D	I	R
I	L	D	N	R	U	E	V	A

ADD-IT

1.

9	9	5	7	1
10	12	3	11	1
2	8		6	3
4	12	4	8	2
11	10	5	7	6

2.

5	1	7	2	3
10	7	2	10	11
6	11		6	12
8	1	5	8	3
12	9	9	4	4

NUMBER PLACE 1

1	7	2	5	8	4	3	6	9
9	3	4	1	7	6	5	8	2
6	5	8	2	9	3	4	1	7
4	2	9	6	3	5	1	7	8
3	8	7	9	1	2	6	4	5
5	1	6	8	4	7	9	2	3
8	4	1	7	5	9	2	3	6
2	9	3	4	6	8	7	5	1
7	6	5	3	2	1	8	9	4

NUMBER PLACE 2

4	3	1	8	2	9	5	6	7
7	2	8	6	1	5	4	3	9
6	9	5	4	7	3	2	1	8
2	5	6	7	9	4	3	8	1
3	1	7	5	8	2	9	4	6
8	4	9	3	6	1	7	2	5
1	7	3	2	5	8	6	9	4
9	6	4	1	3	7	8	5	2
5	8	2	9	4	6	1	7	3

NUMBER PLACE 3

2	1	3	5	7	9	6	8	4
7	5	8	1	4	6	9	2	3
6	9	4	3	2	8	5	1	7
9	3	5	8	6	2	7	4	1
1	6	7	9	3	4	8	5	2
8	4	2	7	5	1	3	9	6
4	7	9	6	1	5	2	3	8
3	8	1	2	9	7	4	6	5
5	2	6	4	8	3	1	7	9

NUMBER PLACE 4

7	5	3	6	9	1	2	4	8
1	6	9	2	8	4	7	3	5
8	4	2	5	7	3	6	1	9
2	8	5	3	1	9	4	6	7
9	7	6	8	4	2	1	5	3
3	1	4	7	5	6	8	9	2
5	9	8	1	6	7	3	2	4
4	3	1	9	2	8	5	7	6
6	2	7	4	3	5	9	8	1

NUMBER PLACE 5

4	1	6	5	8	3	9	7	2
9	7	3	4	6	2	5	1	8
5	2	8	1	9	7	3	4	6
2	5	9	7	3	6	1	8	4
8	4	7	9	1	5	6	2	3
3	6	1	2	4	8	7	9	5
6	3	4	8	7	1	2	5	9
1	8	5	6	2	9	4	3	7
7	9	2	3	5	4	8	6	1

NUMBER PLACE 6

4	3	7	2	6	5	1	9	8
9	8	2	7	4	1	6	5	3
6	5	1	8	9	3	2	4	7
1	2	3	9	5	7	8	6	4
8	6	5	3	1	4	7	2	9
7	9	4	6	2	8	5	3	1
2	1	9	4	7	6	3	8	5
5	4	8	1	3	2	9	7	6
3	7	6	5	8	9	4	1	2

NUMBER PLACE 7

2	6	7	1	4	3	8	5	9
9	3	1	7	8	5	4	2	6
8	4	5	9	2	6	3	7	1
6	1	4	5	9	7	2	8	3
7	5	2	3	1	8	6	9	4
3	9	8	4	6	2	5	1	7
1	7	6	8	5	4	9	3	2
4	8	9	2	3	1	7	6	5
5	2	3	6	7	9	1	4	8

NUMBER PLACE 8

7	8	4	5	3	9	2	6	1
3	9	6	7	1	2	8	5	4
5	2	1	6	8	4	7	9	3
8	6	5	1	4	7	9	3	2
9	1	2	8	6	3	5	4	7
4	3	7	2	9	5	1	8	6
6	7	9	4	5	1	3	2	8
1	5	8	3	2	6	4	7	9
2	4	3	9	7	8	6	1	5

NUMBER PLACE 9

5	6	7	4	1	9	2	8	3
1	3	2	8	5	6	9	7	4
8	9	4	2	7	3	1	5	6
7	2	6	5	9	8	4	3	1
4	8	9	6	3	1	7	2	5
3	5	1	7	2	4	6	9	8
2	1	8	3	4	7	5	6	9
9	7	3	1	6	5	8	4	2
6	4	5	9	8	2	3	1	7

NUMBER PLACE 10

7	2	1	3	6	9	4	5	8
9	5	4	1	8	7	2	3	6
8	6	3	4	5	2	1	7	9
6	1	9	2	3	5	8	4	7
4	3	8	7	9	1	6	2	5
2	7	5	8	4	6	9	1	3
1	9	6	5	7	4	3	8	2
5	8	2	6	1	3	7	9	4
3	4	7	9	2	8	5	6	1

NUMBER PLACE 11

8	5	6	3	2	9	7	4	1
1	9	3	7	4	5	2	8	6
4	2	7	1	8	6	9	3	5
7	1	2	5	9	8	4	6	3
6	4	9	2	1	3	8	5	7
5	3	8	6	7	4	1	2	9
9	8	5	4	6	1	3	7	2
3	7	1	8	5	2	6	9	4
2	6	4	9	3	7	5	1	8

NUMBER PLACE 12

9	8	7	2	5	4	1	6	3
6	4	1	3	7	8	5	9	2
2	3	5	9	1	6	4	8	7
8	1	9	4	3	5	7	2	6
5	2	6	7	8	9	3	4	1
4	7	3	1	6	2	9	5	8
7	9	4	8	2	3	6	1	5
1	6	8	5	4	7	2	3	9
3	5	2	6	9	1	8	7	4

NUMBER PLACE 13

5	9	7	6	2	4	1	8	3
3	1	2	7	9	8	5	4	6
4	6	8	3	5	1	9	7	2
1	8	4	5	3	7	2	6	9
9	2	5	1	4	6	7	3	8
6	7	3	2	8	9	4	1	5
2	5	1	4	6	3	8	9	7
7	3	9	8	1	2	6	5	4
8	4	6	9	7	5	3	2	1

NUMBER PLACE 14

2	9	3	7	5	6	8	1	4
7	6	4	1	9	8	2	5	3
8	1	5	2	4	3	6	9	7
5	4	6	3	1	9	7	8	2
9	7	8	5	2	4	1	3	6
3	2	1	8	6	7	5	4	9
6	8	2	9	3	1	4	7	5
4	3	7	6	8	5	9	2	1
1	5	9	4	7	2	3	6	8

NUMBER PLACE 15

1	6	5	8	3	9	2	4	7
9	4	8	6	7	2	3	5	1
3	2	7	1	4	5	6	9	8
7	5	2	4	6	8	9	1	3
4	1	9	7	2	3	5	8	6
6	8	3	5	9	1	7	2	4
2	7	4	9	8	6	1	3	5
8	3	1	2	5	7	4	6	9
5	9	6	3	1	4	8	7	2

NUMBER PLACE 16

6	2	5	3	8	4	9	1	7
3	9	1	7	5	6	2	4	8
7	8	4	9	2	1	5	6	3
1	3	8	6	9	5	4	7	2
4	6	9	2	7	3	1	8	5
2	5	7	1	4	8	6	3	9
9	7	6	4	3	2	8	5	1
8	4	2	5	1	7	3	9	6
5	1	3	8	6	9	7	2	4

NUMBER PLACE 17

5	2	8	9	7	6	4	3	1
9	7	3	4	1	5	6	2	8
6	4	1	3	8	2	7	5	9
1	6	9	5	4	8	2	7	3
4	3	7	6	2	9	8	1	5
8	5	2	7	3	1	9	4	6
3	8	6	2	5	7	1	9	4
2	1	5	8	9	4	3	6	7
7	9	4	1	6	3	5	8	2

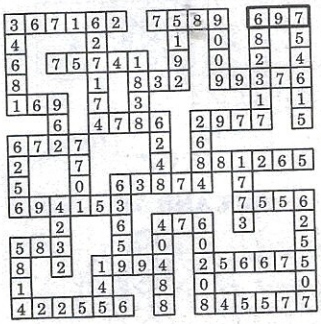
NUMBER PLACE 18

2	1	5	9	4	8	7	3	6
4	8	6	7	3	1	5	9	2
9	3	7	2	5	6	8	4	1
7	5	2	3	8	9	6	1	4
8	6	9	4	1	2	3	7	5
1	4	3	5	6	7	2	8	9
5	9	4	8	2	3	1	6	7
6	2	8	1	7	4	9	5	3
3	7	1	6	9	5	4	2	8

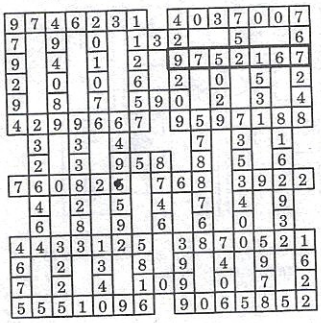
NUMBER PLACE CHALLENGER

10	4	12	7	3	15	16	13	2	11	9	8	6	14	1	5
2	8	6	1	4	7	11	14	10	16	15	5	13	3	12	9
15	11	16	13	5	2	9	1	14	6	3	12	10	8	7	4
5	14	9	3	12	8	6	10	13	7	4	1	11	15	2	16
4	13	14	8	6	5	1	16	15	12	2	7	3	10	9	11
3	10	7	9	13	11	2	15	8	14	6	4	12	16	5	1
1	16	2	15	10	12	14	7	5	9	11	3	4	13	6	8
11	12	5	6	8	4	3	9	16	10	1	13	14	2	15	7
16	5	15	12	14	3	8	4	7	1	10	6	9	11	13	2
7	2	13	4	11	9	10	6	12	15	8	16	5	1	3	14
8	6	1	11	16	13	7	2	9	3	5	14	15	4	10	12
9	3	10	14	15	1	12	5	11	4	13	2	16	7	8	6
12	15	4	2	7	10	5	8	6	13	14	11	1	9	16	3
13	9	3	5	2	6	4	11	1	8	16	15	7	12	14	10
6	1	11	16	9	14	13	12	3	2	7	10	8	5	4	15
14	7	8	10	1	16	15	3	4	5	12	9	2	6	11	13

KROSS NUMBER 1

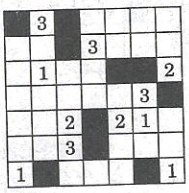


KROSS NUMBER 2

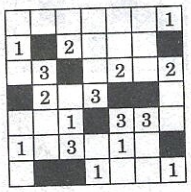


BLACK MAGIC

1.



2.



BINGO PLAYS 1

	B	I	N	G	O
P	8	(16)	41	55	68
L	13	(24)	35	59	61
A	3	(27)	FREE	48	67
Y	5	(28)	40	52	65
S	10	(19)	37	51	75

BINGO PLAYS 2

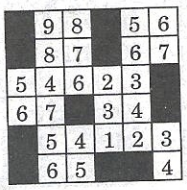
	B	I	N	G	O
P	14	16	42	50	68
L	(9)	(27)	(41)	(58)	(75)
A	13	25	FREE	57	70
Y	11	28	36	48	64
S	3	20	34	49	61

BINGO PLAYS 3

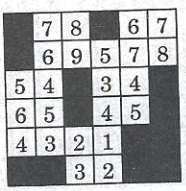
	B	I	N	G	O
P	(4)	30	35	46	74
L	(2)	19	45	47	72
A	(11)	16	FREE	48	70
Y	(15)	23	38	50	68
S	(8)	20	36	59	65

GRIDDIGITS

1.



2.

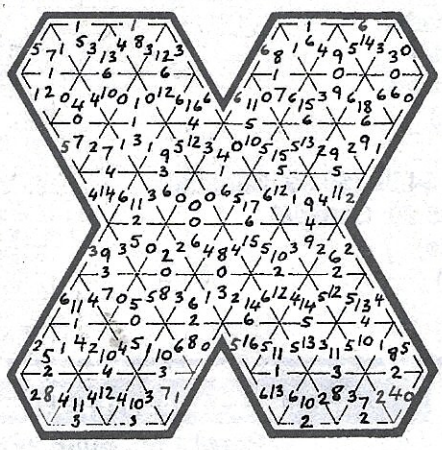


FIVE BY FIVE

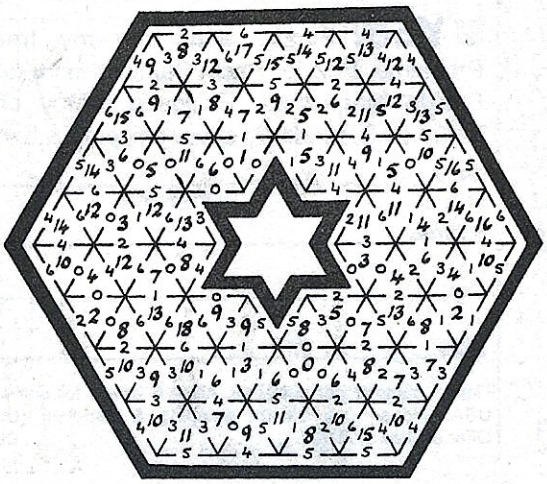
5	1	3	6	9	8	2	0	3	5	7	0	9	3	4	4	5	8
2	4	9	8	6	5	8	7	1	0	4	1	6	5	7	6	2	1
3	6	5	3	9	7	2	4	5	6	7	9	8	9	3	1	9	5
5	1	0	1	3	2	7	6	8	3	9	5	4	8	0	5	6	4
0	2	4	4	5	0	9	1	0	5	3	2	1	2	7	7	6	3
8	3	5	2	4													
5	2	3	0	7													
1	6	6	5	4													
3	4	2	3	6	5	1	7	1	5	6	2	0	2	8	4	5	7
6	5	8	6	6	1	2	3	7	9	4	5	4	7	5	6	1	8
1	7	4	7	3	5	9	5	3	2	6	7	1	3	3	5	6	7
2	7	5	9	8	7	2	9	8	5	7	1	6	8	4	9	6	5
5	0	8	0	8	2	6	0	6	0	6	5	3	5	6	9	8	F
													3	9	7	5	I
													9	5	0	8	N
													0	2	6	5	I
9	5	1	8	5	0								5	0	6	1	S
5	4	6	5	3	7								8	7	5	2	H
7	8	4	9	7	9	6	6	2	8	5	6	8	0	5	1	7	5
0	5	0	1	8	5	4	6	1	0	8	2	5	9	4	6	9	0
9	9	3	5	0	6	7	2	5	6	3	7	8	1	2	5	2	0
9	3	4	6	2	9	5	8	4	3	5	1	8	3	7	2	2	5
6	0	5	8	1	0	1	5	1	6	9	2	1	5	6	2	7	0

TRIGONS

1.

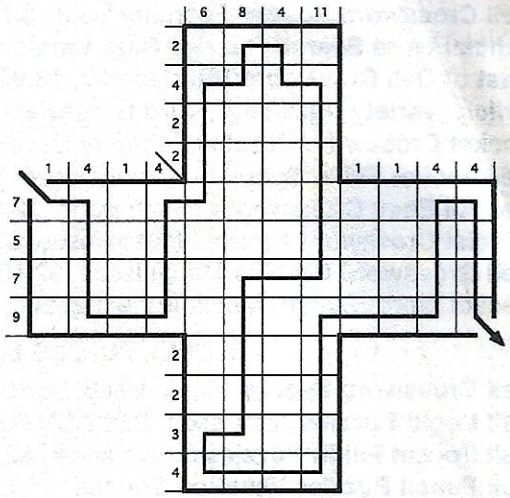


2.

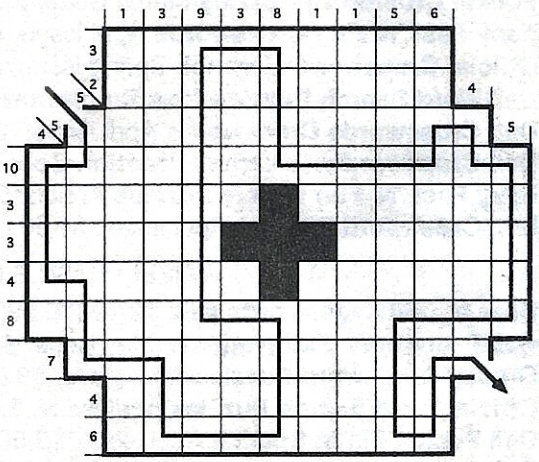


MATH MAZES

1.



2.



SUM SPOTS

8	27	9	10
12	7	17	18
13	6	24	11
21	14	4	15

CROSSMATH

6	3	−	6		6	5	7	÷	9		5	7	−	2
6	X	9	8		9	0	−	1	0		9	+	6	+
7	4	−	4		4	+	2	3	0		+	4	X	4
÷	4	8	÷	3	−	2		3	X	6	4	÷	1	6
2	4	+	9	7	1		8	÷	4	−	1			
9	÷	3		+		8	X	7	÷	4		3	X	6
	2	X	4	8		1	6	+	1		6	X	6	−
6	2	5	−	5	9	0		5	5	5	+	4	4	4
÷	2	−	1		3	+	8	0		4	5	÷	9	
3	X	6		5	X	9	−	1		+		2	−	1
			7	+	9	+	5		7	1	1	+	2	9
2	4	+	6	4	−	3		9	+	2	+	8	3	+
7	X	6	−		1	9	8	+	6		3	+	5	4
÷	6	X	4		8	5	−	4	0		4	2	÷	1
3	+	5	2		3	+	2	3	1		3	X	2	7

DELL PUZZLE MAGAZINES ON SALE IN JANUARY

Dell Crossword Puzzles February issue, $2.50 ($3.99, Canada) — **January 1**
Dell Crossword Special February issue, $3.99 ($5.99, Canada) — **January 1**
Official Word Search Puzzles Plus Tanglewords February issue, $2.50 ($3.99, Canada) — **January 1**
Best of Dell Crossword Puzzles #59, $3.99 ($5.99, Canada) — **January 8**
Official Variety Puzzles & Word Games March issue, $3.99 ($5.99, Canada) — **January 8**
Pocket Crossword Puzzles February issue, $2.50 ($3.99, Canada) — **January 8**
Dell Pocket Fill-In Special February issue, $2.50 ($3.99, Canada) — **January 15**
Dell All Easy Crosswords March issue, $2.99 ($4.50, Canada) — **January 15**
Official Crossword Puzzles March issue, $3.50, ($4.99, Canada) — **January 22**
Dell Crossword Puzzles March issue, $2.50 ($3.99, Canada) — **January 29**
Pocket Word Search March issue, $2.99 ($4.50, Canada) — **January 29**

DELL PUZZLE MAGAZINES ON SALE IN FEBRUARY

Dell Crossword Special March issue, $3.99 ($5.99, Canada) — **February 5**
Dell Logic Puzzles April issue, $2.99 ($4.50, Canada) — **February 5**
Dell Pocket Fill-In Puzzles March issue, $2.50 ($3.99, Canada) — **February 5**
Dell Pencil Puzzles Vacation Special
Special Edition Spring issue, $5.50 ($7.99, Canada) — **February 5**
Pocket Crossword Puzzles March issue, $2.50 ($3.99, Canada) — **February 5**
Easy Fast 'N' Fun Crosswords April issue, $2.99 ($4.50, Canada) — **February 12**
Official Crossword Yearbook Spring issue, $2.99 ($4.50, Canada) — **February 12**
Dell Word Search Puzzles Plus Tanglewords April issue, $2.99 ($4.50, Canada) — **February 12**
Dell Crosswords Crosswords April issue, $2.99 ($4.50, Canada) — **February 19**
Dell Crossword and Variety Vacation Special April issue, $5.50 ($7.99, Canada) — **February 19**
Easy Fast 'N' Fun Variety Puzzles April issue, $3.99 ($5.99, Canada) — **February 19**
Dell Crossword Puzzles April issue, $2.50 ($3.99, Canada) — **February 26**

DELL PUZZLE MAGAZINES ON SALE IN MARCH

Best of Dell Crosswords #60, $3.99 ($5.99, Canada) — **March 5**
Dell Crossword Extravaganza May issue, $4.99 ($6.99, Canada) — **March 5**
Official Crossword Puzzles April issue, $3.50 ($4.99, Canada) — **March 5**
Official Word Search Puzzles April issue, $2.50 ($3.99, Canada) — **March 5**
Dell Pocket Fill-In Special April issue, $2.50 ($3.99, Canada) — **March 12**
Dell Crossword Special April issue, $3.99 ($5.99, Canada) — **March 12**
Best of Dell Math Puzzles and Logic Problems May issue, $4.99 ($6.99, Canada) — **March 12**
Official Variety Puzzles & Word Games May issue, $3.99 ($5.99, Canada) — **March 12**
Pocket Crossword Puzzles April issue, $2.50 ($3.99, Canada) — **March 12**
Dell All Easy Crosswords May issue, $2.99 ($4.50, Canada) — **March 19**
Pocket Word Search May issue, $2.99 ($4.50, Canada) — **March 26**

GET 3 LOGIC MAGAZINES FREE!

To introduce you to our different logic puzzle magazines available on the newsstand, we'd like to send you a ***Logic Problems Puzzle Pack*** of 3 issues for ***FREE!*** You pay only $1.95 for handling.

This special offer is limited to first-time customers only.

DELL MAGAZINES DIRECT
6 Prowitt St., Suite VPS
Norwalk, CT 06855-1220

☑ ***YES!*** Please send me my free Logic Problems Puzzle Pack Sampler (DLP3) of 3 Dell Puzzle Magazines. Enclosed is my check for $1.95 (U.S. funds) to cover shipping & handling.

Name _____
(Please print)
Address _____
City _____
State _____ ZIP _____

Limit 1 sampler per customer. Allow 6 weeks for delivery. Outside USA: Please pay $3 for shipping & handling (U.S. funds). Offer expires 12/31/02.
021-CLP2L2.

LOGIC PROBLEM 1

Turner (clue 1) and Ross (clue 3) are women. Julia's favorite band was formerly Petals of Metal (clue 6). Since by clue 2, Pat's favorite band wasn't formerly known as Handsome Phantoms, Fluff 'n' Stuff, or Winnebago Schmoes, they were known as Scream Machine. The Handsome Phantoms fan isn't George (clue 3), and since he's a man (clue 7), not Holly. By elimination, he's Chris. By clue 3, Chris is Wong, Mr. Radcliffe is Pat, and George is Rivera. Ross isn't Julia (also clue 3); she's Holly, and Julia is Turner. George's favorite band wasn't known as Fluff 'n' Stuff (clue 5); they were known as the Winnebago Schmoes, and Holly's favorite was known as Fluff 'n' Stuff. The Shanteuses aren't Turner's (clue 1), Rivera's (clue 5), Wong's (clue 7) or Ross's (clue 9) favorite band; they're Radcliffe's favorite. The Shady Boys fan is a man (clue 4), but not George (clue 8), so he's Chris. George's favorite band isn't The Shamrockers (clue 5) or Shallow Hearts (clue 8); it's Shaggy Dogs. By clue 9, Holly's favorite band isn't The Shamrockers; it's Shallow Hearts, and Julia's is The Shamrockers. In summary:

Mr. Chris Wong, Handsome Phantoms, Shady Boys
Mr. George Rivera, Winnebago Schmoes, Shaggy Dogs
Ms. Holly Ross, Fluff 'n' Stuff, Shallow Hearts
Ms. Julia Turner, Petals of Metal, The Shamrockers
Mr. Pat Radcliffe, Scream Machine, The Shanteuses

LOGIC PROBLEM 2

The Mountain Motors car doesn't have the LUV2FLY (clue 1), GOLF4ME or EZMONEY (clue 4), or B COOL (clue 7) plates; it has the FUNCAR plates. It's not owned by Brad (clue 1), Susan (clue 4), Michelle or Kevin (clue 5), so it's Josh's car. Brad's car isn't from Friendly Frank's (clue 3), Spring Valley Wheels (clue 6), or Liberty Autos (clue 9); it's from Sunset Sales. His plates don't read LUV2FLY (clue 1), EZMONEY (clue 8), or B COOL (clue 9); they read GOLF4ME. Brad's car was either in bay 1 or bay 5 (clue 6). By clue 3, Brad's car was in bay 1, and Friendly Frank's was in 2. The Spring Valley car was in 5 (clue 6). Josh wasn't in bay 4 (clue 2); he was in 3. By elimination, the car from Liberty Autos was in 4. Kevin was in bay 2 (clue 5). By clue 7, the Spring Valley car has the B COOL plates. The EZMONEY car isn't Susan's (clue 4) or Michelle's (clue 8); it's Kevin's. By elimination, Susan has the LUV2FLY plates. Susan was in bay 4 (clue 4). Michelle, then, was in bay 5. In summary:

Brad, GOLF4ME, Sunset Sales, 1
Josh, FUNCAR, Mountain Motors, 3
Kevin, EZMONEY, Friendly Frank's, 2
Michelle, B COOL, Spring Valley Wheels, 5
Susan, LUV2FLY, Liberty Autos, 4

LOGIC PROBLEM 3

The five winners were the sophomore (clue 1), the senior surnamed Douglas (clue 3), the freshman who made "Squeeze Cheese Chemistry" (clue 6), and the two juniors, who were Kevin and the First Prize winner (clue 9). Rachel won Third Prize (clue 7). Kevin didn't win Second Prize (clue 2), so by clue 4, he was one of two Honorable Mention winners. Since the Truman boy, who made "Jelly Bean Teleportation" (clue 10), didn't get an Honorable Mention (clue 4), he's Greg. Amanda also didn't get an Honorable Mention (clue 1), so Amy did. Amy is Edmonds (clue 5). By clue 4, Amy made "Dandelion Mutations" and Kevin is Kerns. Amanda made "Roller Coaster Physics" (clue 8), so Kevin made "Pretzel Engineering." By elimination, Rachel made "Squeeze Cheese Chemistry." Since freshman Rachel isn't Douglas (clue 3), Amanda is, and Rachel is Connors. By clue 9, Amanda didn't win First Prize; she won Second Prize. By elimination, Greg won First Prize and is the other junior. Amy, then, is the sophomore. In summary:

Amanda Douglas, senior, "Roller Coaster Physics," Second Prize
Amy Edmonds, sophomore, "Dandelion Mutations," Honorable Mention
Greg Truman, junior, "Jelly Bean Teleportation," First Prize
Kevin Kerns, junior, "Pretzel Engineering," Honorable Mention
Rachel Connors, freshman, "Squeeze Cheese Chemistry," Third Prize

LOGIC PROBLEM 4

By the introduction, two Jade-Eye hopefuls succeeded, and two failed. Xamato and the fearless Jade-Eye were the two successful candidates (clue 4). By clue 6, Egarth failed. Neither Querli (clue 1) nor Xamato (clue 4) tried out fourth. The fourth candidate's special skill isn't agility (clue 1) or mental powers (clue 2); it's swordsmanship or fearlessness. Since Egarth's skill is neither swordsmanship (clue 3) nor fearlessness (clue 6), Egarth also wasn't fourth; Nulunu was. By clue 2, Anaken's protégé was third, and the hopeful with mental powers was second. Anaken's protégé isn't Xamato (clue 4) or Egarth (clue 6), so he's Querli. By clue 1, then, the agile hopeful tried out first and Yoga's protégé has mental powers. KarKar Kink's protégé wasn't first (clue 5); Dobi-Don's was and KarKar's went last. By clue 3, Egarth tried out second, and Querli's talent is swordsmanship. Querli, then, was the other unsuccessful candidate. By elimination, Nulunu's special talent is fearlessness, and Xamato went first. In summary:

Egarth, Yoga, mental powers, second, rejected
Nulunu, KarKar Kinks, fearlessness, fourth, accepted
Querli, Anaken, swordsmanship, third, rejected
Xamato, Dobi-Don, agility, first, accepted

LOGIC PROBLEM 5

The hostess's scene wasn't from "King Lear" (clue 2), "Cymbeline" (clue 3), "Twelfth Night" (clue 6), "Hamlet" (clue 7), or "The Merchant of Venice" (clue 8); her scene was from "Romeo and Juliet." She's not Mona (clue 3), Violet (clue 4), Belle (clue 7), Denise (clue 8), or Kara (clue 9), so she's Angie. Angie isn't Perry (clue 1), Pitt (clue 3), Leigh (clue 5), Hansen (clue 8), or Bonner (clue 9); she's Kerr. The second girl to audition did a scene from "Twelfth Night" (clue 6). By clue 8, the guest who performed "The Merchant of Venice" auditioned third, Hansen went fourth, and Denise went fifth. Perry auditioned after Mona (clue 1), who by clue 3, went after Pitt, who went after the girl who performed the "Cymbeline" scene, so the "Cymbeline" performer auditioned first. Denise didn't perform the scene from "Hamlet" (clue 8); Hansen did, and Denise's scene was from "King Lear." Since Mona's scene wasn't from "Hamlet" (clue 7), her scene was from "The Merchant of Venice," and Pitt's was from "Twelfth Night" (clue 3). By clue 9, Bonner auditioned first and Kara is Pitt. Denise is Perry (clue 1). Mona, then, is Leigh. By clue 7, the "Hamlet" performer isn't Belle; she's Violet, and Belle is Bonner. Belle's audition was at 12:00 (clue 2). By clue 3, Kara's was at 12:10, and Mona's was at 12:15. Violet's was at 12:20 and Denise Perry's was at 12:30 (clue 8). In summary:

Angie Kerr, "Romeo and Juliet," hostess
Belle Bonner, "Cymbeline," 12:00
Denise Perry, "King Lear," 12:30
Kara Pitt, "Twelfth Night," 12:10
Mona Leigh, "The Merchant of Venice," 12:15
Violet Hansen, "Hamlet," 12:20

LOGIC PROBLEM 6

Mary and Keane predicted 2 and 4 inches, in some order (clue 6). By clue 4, Adam, the woman who predicted Tuesday, and WHAM's forecaster expected 1, 3, and 5 inches of snow, in some order. The only women are Mary and Beth (clue 1), so the Tuesday predictor is Beth. She didn't predict 1 inch (clue 1) or 5 inches (clue 5); she predicted 3 inches. By clue 2, Harold predicted snow on Wednesday and the WORD forecaster predicted Thursday. 5 inches wasn't predicted for Monday or Friday (clue 5), or Thursday (clue 7); it was predicted for Wednesday. By clue 4, Adam predicted 1 inch and Harold is the WHAM forecaster, and by clue 6, Keane is James. By clue 5, Beth is the WAKE forecaster, and Mr. Becker predicted Monday. Adam, then, is Mr. Becker. The man who made the Friday prediction (clue 7) is James. By elimination, Mary made the Thursday prediction. Mary made a prediction of 2 inches and James made a prediction of 4 inches (clue 7). Also by clue 7, James isn't the WARM forecaster; he's works for WEST, and Adam works for WARM. Mary is Stevens (clue 1). Ellis isn't Harold (clue 3); Ellis is Beth, and Harold is Bates. In summary:

Adam Becker, WARM, Monday, 1"
Beth Ellis, WAKE, Tuesday, 3"
Harold Bates, WHAM, Wednesday, 5"
James Keane, WEST, Friday, 4"
Mary Stevens, WORD, Thursday, 2"

LOGIC PROBLEM 7

By the introduction, the prices of all the Beanies were whole dollar amounts. The most expensive Beanie cost $15, and all the Beanies cost more than $5 (clue 1). By clue 7, Angel the Fish cost $15, while the lime Beanie and the one from Jeff's Gifts cost $6 and $9, in some order. One horse cost twice as much as the other horse (clue 5). Since by the introduction, Bob spent exactly $50 on the five Beanies, Clyde and Dale cost $6 and $12, in some order, and the remaining Beanie cost $8. Clyde cost more than the lemon Beanie (clue 2), so Dale cost $6 and Clyde cost $12. By clue 4, Clyde was found at Gilroy's Toys. Evelyn isn't the $8 Beanie (also clue 4); Barbara is, and Evelyn cost $9. By the introduction, two Beanies are orange (nectarine and peach), and two are green (lime and mint). Angel isn't lemon (clue 2) or green (clue 6); it's orange. Since both the orange Beanies cost more than both the green ones (clue 6), Clyde is also orange. Clyde is peach (clue 4), so Angel is nectarine. Also by clue 4, Angel is from Fred's Kids' Shop and the lemon Beanie is Dale. Evelyn is lime and Dale is from Jeff's Gifts (clue 7). By elimination, Barbara is mint. Barbara isn't from Ingrid's Card Shop (clue 3); Evelyn is, and Barbara is from Henry's Department Store. In summary:

Angel the Fish, nectarine, Fred's Kids' Shop, $15
Barbara the Barnacle, mint, Henry's Department Store, $8
Clyde the Horse, peach, Gilroy's Toys, $12
Dale the Horse, lemon, Jeff's Gifts, $6
Evelyn the Elephant, lime, Ingrid's Card Shop, $9

LOGIC PROBLEM 8

By clue 3, the man from Youngdale is either the accountant or the realtor, neither of whom have brown eyes. The Youngdale man represents the east district (clue 1). By clue 6, he's the accountant. The accountant isn't Ingram (clue 1), Unger (clue 2), Quinn (clue 4), or Zimms (clue 5), so he's O'Shea. Chris and the downtown rep both have brown eyes (clue 7). By clue 1, Chris is Ms. Ingram, Mary is the downtown rep, and the blue-eyed Jamesboro resident is the realtor. The realtor is the west rep (clue 6). Pat and Quinn are, in some order, the baker and the Lakeside resident (clue 4), so Mary is Quinn. Pat is the green-eyed farmer (clue 1). By clue 4, Mary is the baker and Pat lives in Lakeside. Chris, then, is the teacher. Ms. Zimms isn't the farmer (clue 5), so she's the realtor, and Unger is the farmer. Since Ms. Zimms isn't Henry, she's Dale, and Henry is O'Shea. By clue 2, Unger is the north rep and Chris is the south rep. Also by clue 2, Chris doesn't live in Valleyview; she lives in Kingston. By elimination, Mary lives in Valleyview. In summary:

Chris Ingram, teacher, south, Kingston
Dale Zimms, realtor, west, Jamesboro
Henry O'Shea, accountant, east, Youngdale
Mary Quinn, baker, downtown, Valleyview
Pat Unger, farmer, north, Lakeside

LOGIC PROBLEM 9

By the introduction, each plaid contained a combination of three of the following colors: blue, green, purple, red, and yellow. Darla's plaid contained purple (clue 1), but not red (clue 6). Since no plaid had purple and yellow (clue 7), her plaid is blue-green-purple. Just one other girl chose a blue-and-green plaid (clue 8); her third color is either red or yellow. Just one girl chose a purple-and-red plaid (clue 1); her third color is either blue or green. By elimination, there are only two other unique three-color combinations: green-red-yellow and blue-red-yellow. Mallory didn't choose red (clue 5); she chose the other blue-and-green plaid with yellow as her third color. The Perkins girl didn't choose red (clue 1). She isn't Mallory (clue 6); she's Darla. Vanessa didn't choose yellow (clue 4), so she chose the purple-and-red plaid. By clue 2, Vanessa is Powers. The vest, which doesn't contain green (clue 4), isn't Vanessa's (clue 2); it's blue-red-yellow. Also by clue 2, Vanessa's garment and the vest shared just one color, so they shared red, and Vanessa's third color is green. Parker chose the vest (clue 6). By clue 3, Sandra chose green-red-yellow and Vanessa got the skirt. By elimination, Rachel chose the vest. Sandra isn't Payne (clue 3); Mallory is, and Sandra is Peterson. Darla got the jacket (clue 7). By clue 5, Mallory didn't get the pants; Sandra did, and Mallory got the hat. In summary:

Darla Perkins, jacket, blue-green-purple
Mallory Payne, hat, blue-green-yellow
Rachel Parker, vest, blue-red-yellow
Sandra Peterson, pants, green-red-yellow
Vanessa Powers, skirt, green-purple-red

LOGIC PROBLEM 10

The Irish setter won 3rd Prize (clue 3) and the poodle was presented third (clue 5). The dog that won 4th Prize was not presented fourth or fifth (clue 1) and the dog that won 1st Prize was not presented first (clue 2). By clue 6, then, the dog that was presented second won 2nd Prize and the dog that was presented fifth won 5th Prize. By clue 2, the poodle won 4th Prize, Blue won 5th Prize, and the setter was the first dog shown. By elimination, the fourth dog shown won 1st Prize. Titus was shown fourth and Blue is the boxer (clue 1). Rover was shown second (clue 3) and is the beagle (clue 6). By elimination, Titus is the collie. By clue 4, Butch is the setter and Sparky is the poodle. In summary:

Blue, boxer, fifth, 5th Prize
Butch, Irish setter, first, 3rd Prize
Rover, beagle, second, 2nd Prize
Sparky, poodle, third, 4th Prize
Titus, collie, fourth, 1st Prize

LOGIC PROBLEM 11

Cudahy sold the van (clue 1). The five cars, which sold for five different prices, are the 1992 and 1995 (introduction), 1993 (clue 1), and 1988 and 1999 (clue 8) models. The cheapest car sold for $1,250, and the most expensive car sold for $3,000 (also clue 8). By clue 2, the 1993 model is neither the highest- nor the second-highest-priced vehicle. Since the 1993 model was sold for more than the van, which was sold for more than the Loon (clue 1), the 1993 model's price was the third-highest, the van was second-lowest, and the Loon was the cheapest. By clue 3, the SUV was sold for half the price of either the 1992 or 1988 vehicle, and the SUV is either the 1999 or 1995 vehicle. By clue 2, the highest and second-highest priced vehicles are the 1992 and 1988 vehicles, respectively. The SUV, then, is the Loon, and the car that's double the SUV's price sold for $2,500. The $2,500 car isn't the 1992 model (clue 2); it's the 1988 model, and the SUV is the 1995 model (clue 3). By elimination, the van is the 1999 model. Ebersol sold his vehicle for $1,000 less than the sedan, but for more than the Caballero (clue 4). Since the sedan was not sold for $2,500, Ebersol sold the 1993 model for $2,000, the van is the Caballero, and the sedan sold for $3,000. Ebersol sold the Firenze, and Dowling sold the sedan (clue 5). Baxter didn't sell the $2,500 vehicle (clue 6); he sold the SUV, and Arlen sold the $2,500 vehicle. Arlen didn't sell the Trekker (clue 7); he sold the Boomer, and Dowling sold the Trekker. Since the 1993 model isn't the compact (clue 1), it's the luxury car. By elimination, Arlen sold the compact. The van sold for $1,500 (clue 6). In summary:

Arlen, Boomer, compact, 1988, $2,500
Baxter, Loon, SUV, 1995, $1,250
Cudahy, Caballero, van, 1999, $1,500
Dowling, Trekker, sedan, 1992, $3,000
Ebersol, Firenze, luxury car, 1993, $2,000

LOGIC PROBLEM 12

By clue 1, the five players were, in clockwise order, Jim, Mr. Jones, Bob Finney, the man who won $20, and the biggest loser. Ed lost money, but wasn't the biggest loser (clue 2), so he's Mr. Jones. One man lost two-and-a-half times more money than the man on his right, Sam, won (clue 3). Sam won $20 and the biggest loser lost $50 (clue 1). By elimination, Dave was the biggest loser. Since Dave and Ed didn't sit next to each other (clue 1), and the two players to the left of Mr. Norris both lost money (clue 2), at least three players lost money. Dave lost $50 and, by clue 4, another player lost $45, so another player who isn't Sam won more than $75, and there were exactly three losers and two winners. Phillips isn't Dave (clue 4); he's Jim or Sam. If Phillips were Jim, by clue 4, Ed would have lost $45. By clue 2, Dave would be Norris, and Jim would have lost more than $45. Jim would not have lost more than $50 (introduction), though, so each of the three losers would have left with an amount within $5 of each other loser, at least $65 less than Sam, and at least $121 less than the other winner. This, however, contradicts clue 5, which states that one man's take-home amount differed from another man's by $10. Therefore, Phillips isn't Jim; Phillips is Sam. By clue 4, Bob Finney lost $45. Jim, then, is the other winner. Norris isn't Dave (clue 2); he's Jim, and Rogers is Dave. Ed lost less than Bob (also clue 2). Ed sat next to Bob, so by clue 5, he lost $40, and the three losers lost a total of $135. Jim, then, won $115. Since each player came to the table with $50 (introduction), Jim left with $165, Ed left with $10, Bob left with $5, Sam left with $70, and Dave left with $0. In summary, in clockwise order:

Jim Norris, $165
Ed Jones, $10
Bob Finney, $5
Sam Phillips, $70
Dave Rogers, $0

LOGIC PROBLEM 13

The top row plants in the photo were numbered 1 - 4, from left to right, and the bottom row plants were numbered 5 - 8, from left to right (introduction). By clue 7, then, the jade plant and the one in the light green pot are in spots 4 and 5, in some order, or spots 1 and 8, in some order. The jade plant is either in 4 or 8 (clue 2). By clue 9, the jade plant is in 4 and the light green pot is in 5. Since the pothos is in the bottom row (clue 2), so is Pam's gift and the plant in the white pot (clue 4). The dark green pot (clue 5) and brass pot (clue 8) are also in the bottom row. The top row containers, then, are the white basket, green basket, yellow basket, and floral pot. Pam's gift isn't in the light green pot (clue 4), so, also by clue 4, the pothos is in spot 7, and Pam's gift and the white potted plant are in spots 6 and 8, in some order. The white pot is in spot 6 and Pam's gift is in spot 8 (clue 9). By clue 3, Anne's and Sue's gifts are in spots 4 and 5, in some order. Anne's gift is in spot 4 (clue 9), so Sue's gift is in spot 5. By clue 5, Louise's plant is in the top row, and the begonia, which is not Sue's, is in the bottom row. Since Louise's plant is somewhere to the right of the begonia (clue 8), the begonia isn't in spot 8; it's in 6, and Louise's plant is in spot 3. Sue didn't give Brenda the fern (clue 1), the spider plant or philodendron (clue 2), or coleus (clue 9); her gift was the Swedish ivy. The plant in spot 1 isn't the fern (clue 1), spider plant (clue 2), or coleus (clue 9), so it's the philodendron. The coleus is to the left of the jade plant (clue 2) and to the right of the white pot (clue 9); it's in spot 3. By clue 5, the fern is in spot 2. The spider plant, then, is in spot 8. The yellow basket is in spot 1 (clue 1). The white and green baskets are in spots 2 and 4, in some order (clue 6), so the floral pot is in spot 3. By clue 3, Val's plant is in spot 6 and the white basket is in spot 2, so the green basket is in spot 4. Denise's gift is in the top row (clue 8), but it isn't the philodendron (clue 2); it's the fern. By clue 1, Michelle didn't give the philodendron; she gave the pothos, and Marion gave the philodendron. The dark green pot is in spot 7 (clue 2). By elimination, the brass pot is in spot 8. In summary:

Anne, jade, green basket, 4
Denise, fern, white basket, 2
Louise, coleus, floral pot, 3
Marion, philodendron, yellow basket, 1
Michelle, pothos, dark green pot, 7
Pam, spider plant, brass pot 8
Sue, Swedish ivy, light green pot, 5
Val, begonia, white pot, 6

LOGIC PROBLEM 14

By clue 2, Jane picked twice as many pints as Ms. Daniels, who picked five more than the shortcake lover. By clue 3, the jam maker picked twice as many pints as Ms. Everett, who picked five more pints than Olivia. No one picked the same number of pints (introduction), so Jane didn't plan to make jam, and Olivia didn't plan to make shortcake. There are only five pickers, so at least one woman appears in both clue 2 and 3. Since Jane isn't Ms. Everett (clue 5), there are only three possibilities: Ms. Daniels is Olivia, Ms. Daniels made jam, or the shortcake lover is Ms. Everett. If Ms. Daniels were Olivia, the shortcake lover would have picked the least. Olivia Daniels would have picked 5 more pints than the shortcake lover, and Ms. Everett would have picked 10 more pints than the shortcake lover. Jane would have picked twice as many pints as the shortcake lover plus 10 more pints, and the jam lover would have picked twice as many pints than the shortcake lover plus 20 more pints. Since the pickers collected a total of 80 pints of strawberries (clue 1), the five women would have collected seven times the amount picked by the shortcake lover, plus 45 pints; the shortcake lover would have picked 5 pints, Olivia 10 pints, Ms. Everett 15 pints, Jane 20 pints, and the jam maker 30 pints. This, however, contradicts clue 4. Therefore, Ms. Daniels is not Olivia. If Ms. Daniels made jam, Olivia would have picked the least, Ms. Everett would have picked 5 more pints than Olivia, the shortcake lover would have picked twice as many pints as Olivia plus 5 more, Ms. Daniels would have picked twice as many pints as Olivia plus 10 more, and Jane would have picked four times as much as Olivia plus 20 more pints. Since the pickers collected a total of 80 pints of strawberries (clue 1), the five women would have collected ten times the amount Olivia picked plus 40 pints; Olivia would have picked 4 pints, Ms. Everett, 9 pints, the shortcake lover 13 pints, Ms. Daniels 18 pints, and Jane 36 pints. This, however, also contradicts clue 4. Therefore, Ms. Daniels didn't make jam. By elimination, the shortcake lover is Ms. Everett. Olivia picked the least pints, Ms. Everett picked 5 more than Olivia, Ms. Daniels picked 10 more than Olivia, the jam maker picked twice as many pints as Olivia plus 10 pints, and Jane picked twice as many pints as Olivia plus 20 pints. Since the pickers collected a total of 80 pints of strawberries (clue 1), the five women collected seven times the amount picked by Olivia, plus 45 pints; Olivia picked 5 pints, Ms. Everett the shortcake lover 10 pints, Ms. Daniels 15 pints, the jam maker 20 pints, and Jane 30 pints. By clue 7, Ms. Daniels made ice cream, Nancy is Ms. Everett, and Olivia is Ms. Farrow. Kelly made jam and Jane is Ms. Brody (clue 4). By clue 6, Olivia didn't make pie; Jane did, and Olivia made smoothies. By elimination, Moira is Ms. Daniels and Kelly is Ms. Carter. In summary:

Jane Brody, pie, 30
Kelly Carter, jam, 20
Nancy Everett, shortcake, 10
Moira Daniels, ice cream, 15
Olivia Farrow, smoothies, 5

LOGIC PROBLEM 15

By the introduction, each clock showed a different time. By clue 6, the red clock-radio plays classical music and read 4:15. The yellow clock doesn't play country or rock (clue 3) or news (clue 5); it plays talk radio. By clue 3, then, the green clock is set to the news station. The tan radio doesn't feature country (clue 7); it plays rock, and the black clock-radio plays country. The dining room clock, which always shows an hour of "3" and the correct minutes (clue 2), was the only one Clara checked that showed an hour of "3" (clue 7). The yellow clock's time was the sum of the black clock's time and green clock's time (clue 5). By clue 7, the black clock's time was the sum of the tan clock's time and the dining room clock's time. The dining room clock isn't yellow (clue 5), red (clue 6), black or tan (clue 7); it is green. The kitchen clock is yellow (clue 3). The black clock-radio showed a later time than both the tan and green clocks (clue 7), so by clue 4, the tan clock featured the earliest time and the yellow clock featured the latest time. The living room clock is exactly 19 minutes faster (clue 2) than the correct bedroom clock (clue 1). Neither featured an hour of 3 o' clock (clue 7), so the red clock reading 4:15 is the bedroom clock and the living room clock is black and reads 4:34. By elimination, the tan clock is the bathroom clock. The green clock read 3:15 (clue 2). By clue 5, the yellow clock read 7:49. The tan clock reads 1:19 (clue 7). In summary:

bathroom, tan, rock, 1:19
bedroom, red, classical, 4:15
dining room, green, news, 3:15
kitchen, yellow, talk radio, 7:49
living room, black, country, 4:34

LOGIC PROBLEM 16

Room 5 wasn't Veronica's (clue 2), Adela's (clue 3), or Tom's (clue 4), so it was Carlotta's or Marcus's. It wasn't ivory (clue 3), blue (clue 4) or green (clue 5); it was lavender or yellow. If room 5 were lavender, by clue 6, it wouldn't have been Marcus's; it would have been Carlotta's. Room 4, then, wouldn't have been Veronica's (clue 2), and it wasn't Adela's (clue 3), or Marcus's (clue 6); it would have been Tom's. Marcus, then, would have been in room 1 (clue 1). By clue 5, Carlotta would have worked for the DMV. Room 3, then, wouldn't have been Adela's (clue 3); it would have been Veronica's, and Adela would have had room 2. By clue 2, Tom's room would have been yellow and Adela would have been the schoolteacher. Since Tom would have been the salesclerk (clue 3), by clue 1, Marcus would have been the mechanic and Tom would have been the over-easy egg lover. By elimination, Veronica would have been the reporter. By clue 6, Veronica would have loved poached eggs. By clue 3, the hard-boiled egg lover's room number was one digit above that of the ivory room. Adela, then, would have been the hard-boiled egg lover and Marcus would have had the ivory room. This, however, contradicts clue 3. Therefore, room 5 isn't lavender, it's yellow. By clue 2, Marcus was in 5, Veronica was in 4, and the schoolteacher was in 3. Veronica worked for the DMV (clue 5). The salesclerk wasn't in room 1 or 2 (clue 3); the salesclerk was in room 5. By clue 1, Marcus loved over-easy eggs and Tom was the mechanic. The three ground floor rooms were ivory (clue 3), green (clue 5) and lavender (clue 6). By elimination, Veronica's room was blue. Veronica didn't like soft-boiled (clue 4), hard-boiled (clue 5), or poached eggs (clue 6), so she liked coddled eggs. The teacher liked soft-boiled eggs (clue 4). By clue 3, the hard-boiled egg lover was in room 2, room 1 was ivory, and Adela was the teacher. By elimination, the poached egg lover was in 1 and Carlotta was the reporter. Since Adela's room was lavender (clue 6), room 2 was green. Carlotta, then, was in 2 (clue 5). By elimination, Tom had room 1. In summary:

Adela, teacher, soft-boiled, lavender, 3
Carlotta, reporter, hard-boiled, green, 2
Marcus, salesclerk, over-easy, yellow, 5
Tom, mechanic, poached, ivory, 1
Veronica, DMV, coddled, blue, 4

LOGIC PROBLEM 17

s has the DJ poster (clue 5). Will doesn't ve the wolf or solar system poster (clue , or the van Gogh print (clue 6); he has ie Corvette poster or the rain forest photo. f Will had the Corvette poster, by clue 2, Josh's room would be between Will's and the wolf poster room. By clue 6, Kang would be on the other side of Will, and the van Gogh room would be on the other side of Kang's room. These five adjacent rooms, then, would either be, in order: the van Gogh lover's, Kang's, Will's, Josh's, and the wolf lover's; or the reverse: the wolf lover's, Josh's, Will's, Kang's, and the van Gogh lover's. The van Gogh print isn't on door 1 (clue 7). Since Russo is in room 3 (clue 4), it wouldn't be on door 2. Five adjacent rooms from west to east, then, would be: the wolf lover's, Josh's, Will's, Kang's, and the van Gogh lover's. Pete isn't in room 1 or 6 (clue 5), so he would be Kang. By clue 10, then, Dan would be in room 1, Todd would be in 2 and have the wolf poster, Josh would be in 3, Will would be in 4, Pete would be in 5, and the van Gogh owner would be in 6. Josh would be Russo (clue 4). By clue 9, Hansen would be Dan, and Todd would be Prince. Dan didn't have the solar system poster (clue 10); Josh would have had it, and Dan would have displayed the rain forest poster. This, however, contradicts clue 7, which states that the rain forest poster isn't on door 1. Therefore, Will doesn't own the Corvette poster; he owns the rain forest poster. By clue 6, Kang has the room between the van Gogh lover's and Will's. Josh is between the Corvette and wolf rooms (clue 2), so he isn't Kang. Josh doesn't own the van Gogh print (clue 8); he has the solar system poster. By elimination, Kang has the DJ poster. Neither the van Gogh nor the rain forest photo is on door 1 (clue 7), so the Corvette or wolf poster is on door 1, Josh is in room 2, and Pete is in 5. By clue 10, Dan is in room 3 and Todd is in 4. Will, then, is in 6, and Todd's poster is the van Gogh print. By elimination, Mike is in room 1. Dan is Russo (clue 4). By clue 9, Hansen is in room 1 and Josh is Prince. Also by clue 9, Hansen has the Corvette poster and Dan has the wolf poster. Will is Miller and Todd is Brown (clue 1). In summary:

Dan Russo, wolf poster, 3
Josh Prince, solar system poster, 2
Mike Hansen, Corvette poster, 1
Pete Kang, DJ poster, 5
Todd Brown, van Gogh print, 4
Will Miller, rainforest photo, 6

LOGIC PROBLEM 18

By the introduction, all the women use the same last names as their husbands, and by clue 16, Josh and Grace have no children, nieces, or nephews. The twelve attendees were: Josh, Grace, Josh's mom and dad, Grace's mom and dad (introduction), Josh's brother and Grace's brother (clue 4), Josh's sister and Grace's sister (clue 7), and the sisters' husbands (also introduction). By clue 2, no two people with the same last name have birthdays in consecutive months. Since Mike's three children have consecutive birthdays (clue 3), he's the father of Grace, her sister, and her brother. Also by clue 3, Ellen is Josh's mom, and one of her sons has a consecutive birthday with his sister. There are only two Howes and two Hawkes (clue 5), so these are, in some order, Grace's sister and husband, and Josh's sister and husband. By clue 9, the five Crowes are Ellen, Josh's dad, Josh, Josh's brother, and Grace; and the three Dunnes are Mike, Grace's mom, and Grace's brother. Lance (clue 11) and Don (clue 12) are the newlyweds' brothers, in some order, so Harold and Fred are the sisters' husbands. Cedric is Ellen's husband (clue 16). Both the Howes' birthdays are earlier in the year than either of the Hawkes' (clue 5). By clue 7, Josh's sister's birthday is eight months earlier than Grace's sister's, so Josh's sister and husband are the Howes and Grace's sister and husband are the Hawkes. Anne isn't Josh's or Grace's sister (clue 10), so she's Mike's wife. Barb (clue 6) and Katy (clue 8), then, are Josh's and Grace's sisters, in some order. Since Josh's brother's birthday is three months earlier than Grace's brother's birthday (clue 4), by clue 3, his birthday is no more than five months away from Grace's sister's. By clue 7, then, his birthday is not consecutive with Josh's sister's. Josh's sister's birthday is one month away from Josh's. Lance's birthday is five months earlier than his dad's (clue 11). Lance is either Grace's brother or Josh's brother. If Lance were Grace's brother, his father would be Mike. By clue 4, Josh's brother's birthday would be eight months before Mike's. This, however, contradicts clue 10. Therefore, Lance isn't Grace's brother; he's Josh's brother. Don, then, is Grace's brother. Don's birthday is three months after Lance's (clue 4) and two months before Cedric's (clue 11). By clue 2, Grace's birthday isn't the month after Lance's or the month before Cedric's; it's the month before Don's (clue 3). By clue 7, Grace's sister's birthday is the month after Don's, and Josh's sister's birthday is four months before Lance's. Katy isn't Grace's sister (clue 14); she's Josh's sister and Barb is Grace's. Also by clue 14, Ellen's birthday is the month before Katy's. By clue 10, Mike's birthday is the month after Cedric's, and Anne's is two month's after Katy's. Ellen's birthday is in January, Katy's is in February, Anne's is in April, Lance's is in June, Grace's is in August, Don's is in September, Barb's is in October, Cedric's is in November, and Mike's is in December. Josh's birthday is in March (clue 3). Katy's husband's is in May and Barb's husband's is in July (clue 5). Barb's husband's birthday is July 2 (introduction). By clue 8, he's Fred, and Harold, whose birthday is on the 11th, is Katy's husband. Don's is September 10 (clue 13). By clue 12, Mike's is the 8th. By clue 6, Josh's is the 1st and Barb's is the 3rd. Katy's is the 9th (clue 8). All birthdays are within the first twelve days of the month, and no two birthdays are on the same day (clue 1), so Grace's is the 12th and Anne's is the 6th (clue 15). By clue 14, Ellen's is on the 4th and Cedric's is on the 5th. Lance's, then, is on the 7th. In summary:

Anne Dunne, April 6
Barb Hawke, October 3
Cedric Crowe, November 5
Don Dunne, September 10
Ellen Crowe, January 4
Fred Hawke, July 2
Grace Crowe, August 12
Harold Howe, May 11
Josh Crowe, March 1
Katy Howe, February 9
Lance Crowe, June 7
Mike Dunne, December 8

LOGIC PROBLEM 19

By the introduction, there were exactly five winning players and five losing players. By definition, the 1st ranked player had to defend her spot and the 10th ranked player had to challenge another player. At least two of the losers, Young (clue 2) and Drake (clue 9), were challengers. Three of the losers, Dahlia (clue 3), Georgette Weaver (clue 4), and Esther (clue 8) were defenders. These five, then, were the losing players. The two winning defenders were Young's opponent, Mae (clue 2), and Drake's opponent, Angela (clue 9). The three winning challengers were Dahlia's opponent, who was ranked 6th (clue 3), Georgette Weaver's opponent, White (clue 4), and Esther's opponent (clue 8). By clue 12, the 7th and 8th ranked players were defenders, so the 9th and 10th ranked players were both challengers. By clue 11, the 7th ranked player won her match. Since Angela was ranked in the top five before her match (clue 9), Mae was the 7th ranked player, and the 8th ranked defender lost. Mae is Turner and Juliette is Young (clue 10). Just one challenger beat a player three rankings above her (clue 1). She wasn't White (clue 4) or Esther's opponent (clue 8), so she was the 6th ranked player. Dahlia, then, was ranked 3rd before the match and 6th after, and her opponent was ranked 3rd after. By clue 5, the player ranked 2nd both before and after her match was either winning defender Angela or defeated challenger Drake. If she were Angela, the 1st ranked player would have been a losing defender. Since a challenger and defender must be within three spots of each other (introduction), the one who challenged the 1st ranked player would have been ranked 4th. This, however, contradicts clue 1, which states that there was only one match in which a defending player was beaten by a challenger three ranks below. Therefore, the 2nd ranked player wasn't Angela; she was Drake. Angela, then, was ranked 1st both before and after. Defender King lost to the person ranked just below her (clue 4), so she's not Dahlia; she's Esther. Also by clue 4, defender Georgette Weaver lost to White, who was ranked directly below her. Esther and her opponent, and White and Georgette, then, were ranked 4th & 5th (pre-match) and 8th & 9th (pre-match), in some order. If Esther were 8th and her opponent 9th, then by clue 8, Ms. Hall would have been Mae's opponent and ranked 10th. This, however, contradicts clue 2, which states that Mae's opponent was Ms. Young. Therefore Esther and her opponent weren't ranked 8th & 9th, respectively; Esther was ranked 4th (5th post-match) and her opponent 5th (4th post-match), Georgette was ranked 8th (9th post-match) and White 9th (8th post-match), and Juliette Young was ranked 10th both before and after. Dahlia is Hall (clue 8). By clue 6, then, Drake is Petunia, and Angela is Carver. By clue 7, Yvette was Dahlia's opponent and McNair was Esther's. Since Portia isn't McNair (clue 13), she's White, and McNair is Francine. By elimination, Yvette is Rainey. In summary:

Angela Carver (1st, 1st) defeated Petunia Drake (2nd, 2nd)
Francine McNair (5th, 4th) defeated Esther King (4th, 5th)
Mae Turner (7th, 7th) defeated Juliette Young (10th, 10th)
Portia White (9th, 8th) defeated Georgette Weaver (8th, 9th)
Yvette Rainey (6th, 3rd) defeated Dahlia Hall (3rd, 6th)

LOGIC PROBLEM 20

By the introduction, there were five different coins (2-xib, 3-xib, 5-xib, 7-xib, and 11-xib coins), and each coin denomination was minted from a different metal (aluminum, brass, copper, steel, and tin, in some order). Each of the ten purses distributed contained a unique combination of three different coins (also introduction). There are only ten possible unique combinations of three different xib coins. The ten combinations are: the 2-, 3-, and 5-xib coins (totaling 10 xibs); the 2-, 3-, and 7-xib coins (totaling 12 xibs); the 2-, 3-, and 11-xib coins (totaling 16 xibs); the 2-, 5-, and 7-xib coins (totaling 14 xibs); the 2-, 5-, and 11-xib coins (totaling 18 xibs); the 2-, 7-, and 11-xib coins (totaling 20 xibs); the 3-, 5-, and 7-xib coins (totaling 15 xibs); the 3-, 5-, and 11-xib coins (totaling 19 xibs); the 3-, 7-, and 11-xib coins (totaling 21 xibs); and the 5-, 7-, and 11-xib coins (totaling 23 xibs). The Westwood student's purse didn't contain tin or copper (clue 5); it contained aluminum, brass, and steel. Also by clue 5, the Pinewood student got 5 more xibs than the Westwood student, and didn't receive a tin coin. The Pinewood student received a copper coin, as well as two of the coins the Westwood student got. There are five pairs of coin totals that differ by five xibs: 10 (3+5+2) and 15 (3+5+7), 14 (2+5+7) and 19 (3+5+11), 15 (3+5+7) and 20 (2+7+11), 16 (2+3+11) and 21 (3+7+11), and 18 (2+5+11) and 23 (5+7+11). The Westwood and Pinewood student's totals weren't 14 and 19, respectively, or 15 and 20, respectively, since each of these pairs includes all five metals. Their totals, then, were 10 and 15, 16 and 21, or 18 and 23. The copper coin is 7 xibs. Jeremy's purse didn't contain aluminum or steel (clue 10); it contained brass, copper, and tin. Also by clue 10, the Ridgewood student got 3 more xibs than Jeremy and didn't get a steel coin. The Ridgewood student, then, got an aluminum coin, as well as two of the coins Jeremy got. There are five pairs of coin totals that differ by three: 12 (2+3+7) and 15 (3+5+7), 15 (3+5+7) and 18 (2+5+11), 16 (2+3+11) and 19 (3+5+11), 18 (2+5+11) and 21 (3+7+11), and 20 (2+7+11) and 23 (5+7+11). Jeremy and the Ridgewood student's totals weren't 15 and 18, respectively, or 18 and 21, respectively, since each of these pairs includes all five metals. And if their totals were 16 and 19, respectively, by clue 10, the steel coin would be 7 xibs. This, however, contradicts the earlier deduction that the copper coin is 7 xibs. Therefore, Jeremy and the Ridgewood student's totals are either 12 and 15, respectively, or 20 and 23, respectively, and the aluminum coin is 5 xibs. Since the aluminum coin is 5 xibs, the Westwood student's total isn't 16 (2+3+11); the Westwood and Pinewood student's totals are 10 and 15, respectively, or 18 and 23, respectively. If the Westwood and Pinewood student's totals were 10 and 15, Jeremy's and the Ridgewood student's totals would be 20 and 23, respectively. If the Westwood and Pinewood student's totals were 18 and 23, respectively, Jeremy's and the Ridgewood student's totals would be 12 and 15, respectively. The Pinewood and Ridgewood students, then, received the 15- and 23-xib purses, in some order. Since Jeremy received either 12 (2+3+7) or 20 (2+7+11) xibs and the Westwood student received either 10 (2+3+5) or 18 (2+5+11) xibs, the 2-xib piece is brass. The 3- and 11-xib coins are tin and steel, in some order. By clue 7, the purse containing 23 xibs is orange and the Youngwood student received 10 xibs. The Westwood student, then, didn't receive 10 xibs; he or she received 18 xibs, the Pinewood student received 23 xibs, Jeremy received 12 xibs, and the Ridgewood student received 15 xibs. The 3-xib coin is tin and the 11-xib coin is steel. Since Denise's purse contained an odd total, which was two less than the red purse's total (clue 8), Denise's total was 19 and the red purse's was 21. By clue 11, the violet purse contained more than Martin's and neither contained a 2-xib coin; Martin received 15 xibs and the violet purse contained 19 xibs. Isabel didn't receive a steel coin (clue 4), so her total was under 15 xibs. Also by clue 4, she received more than the Underwood student, who received more than the yellow purse recipient, so Isabel received 14 xibs, Jeremy goes to Underwood, and the Youngwood student got the yellow purse. By clue 1, the dark blue purse contained more total xibs than Herbie's, which contained more total xibs than the light blue purse, which contained more total xibs than the Vistawood student's purse, and all four students had at least one type of coin in common. The Vistawood student received 14 xibs, the light blue purse contained 16 xibs, Herbie got 18 xibs, and the dark blue purse contained 20 xibs (all contained the 2-xib coin). By clue 6, the pink purse contained 14 xibs and Kendra's contained 21 xibs. The Olivewood purse contained 16 xibs and the white purse contained 18 xibs (clue 9). Freddy, then, who goes to Quillwood (clue 2), received the dark blue purse. Denise doesn't go to Northwood (clue 11); Kendra does, and Denise goes to Zephyrwood. Ed goes to Olivewood (clue 7). By clue 3, Gloria received 23 xibs and the green purse contained 12 xibs. By elimination, Louise got 10 xibs and Martin got the maroon purse. In summary, from least to most total xibs received:

Louise, Youngwood, yellow, brass (2-xibs) + tin (3-xibs) + aluminum (5-xibs) = 10 xibs

Jeremy, Underwood, green, brass (2-xibs) + tin (3-xibs) + copper (7-xibs) = 12 xibs

Isabel, Vistawood, pink, brass (2-xibs) + aluminum (5-xibs) + copper (7-xibs) = 14 xibs

Martin, Ridgewood, maroon, tin (3-xibs) + aluminum (5-xibs) + copper (7-xibs) = 15 xibs

Ed, Olivewood, light blue, brass (2-xibs) + tin (3-xibs) + steel (11-xibs) = 16 xibs

Herbie, Westwood, white, brass (2-xibs) + aluminum (5-xibs) + steel (11-xibs) = 18 xibs

Denise, Zephyrwood, violet, tin (3-xibs) + aluminum (5-xibs) + steel (11-xibs) = 19 xibs

Freddy, Quillwood, dark blue, brass (2-xibs) + copper (7-xibs) + steel (11-xibs) = 20 xibs

Kendra, Northwood, red, tin (3-xibs) + copper (7-xibs) + steel (11-xibs) = 21 xibs

Gloria, Pinewood, orange, aluminum (5-xibs) + copper (7-xibs) + steel (11-xibs) = 23 xibs

COUNT THE TRIANGLES

There are 24 triangles in the diagram: ABD, ABF, ADF, BIF, BQF, CHF, EGF, FCM, FEK, FGK, FHM, FIQ, FQN, FQU, JQO, JQT, LQP, LQR, NQU, OQT, PQR, QVS, QVU, and SVU.

HALF TIME

The diagram consists of 134 squares. One half of 134 is 67. There are 12 shaded squares, so the numbered areas to be shaded in must total 55. The only combination of areas that totals 55 is #1, #5, #6, and #7 (20 + 7 1/2 + 8 + 19 1/2 = 55).

LOST SUMS

A.
```
  5924
   817
+   63
------
  6804
```

B.
```
  6125
   947
+   83
------
  7155
```

BY THE NUMBERS

1. A=5, B=7, C=1; 2. D=2, E=3, F=4.

NUMBERAMA

A. 9 (x3 x3 -27 -27 x3 x3 -27 -27)
B. 42 (÷6 +6 +12 +18 ÷6 +6 +12 +18)
C. 32 (-13 -13 x4 x4 -12 -12 x3 x3)
D. 20 (x4 -8 -4 x5 -9 -5 x6 -10 -6)
E. 24 (÷7 +14 -8 x3 ÷8 +15 -9 x4)
F. 17 (+11 ÷2 +12 ÷2 +11 ÷2 +12 ÷2)
G. 27 (-26 -13 x4 -25 -12 x3 -24 -11 x2)
H. 36 (÷2 ÷3 x4 +32 ÷2 ÷3 x4 +32)
I. 18 (+12 ÷2 ÷2 +13 ÷3 ÷3 +14 ÷4 ÷4)
J. 2 (x8 -8 ÷2 ÷2 x9 -9 ÷3 ÷3)

Other answers may be possible.

MATHEMATICAL DEDUCTION

1. 2 (subtract the bottom and left numbers from the top number); 2. 23 (multiply the right and left numbers, then add the bottom number); 3. 12 (add the odd numbers, then subtract from the even number); 4. 8 (divide the highest number by the lowest number, then add the remaining number); 5. 9 (add the left and bottom numbers, then divide by the right number).

CRYPTIC MATH

By clue 1, J, K, L, and M are 2, 3, 5, and 7, in some order. J is either 2 or 3 (clue 2). Since M is also either 2 or 3 (clue 5), J and M are 2 and 3, in some order. The column consisting of only odd numbers (clue 4), then, isn't the leftmost one or the rightmost one (clue 6); it's the middle column, and N and Q are odd. By clue 2, N = 9, J = 3, and R = 6. M, then, = 2. L = 7 and P = 8 (clue 3), so K = 5 and Q = 1. By clue 6, O = 4. In summary: J = 3, K = 5, L = 7, M = 2, N = 9, O = 4, P = 8, Q = 1, R = 6.

TWO-PART MATH

A.
```
   3 4 1
 x 2 6 5
---------
   1 7 0 5
 2 0 4 6
 6 8 2
---------
 9 0 3 6 5
```

B.
```
  7
+ 4
-----
  1 1
```

ADDITION LOGIC

RADAR = 10, so either D = 4 and R and A = 1 and 2, in some order, or D = 2 and R and A = 1 and 3, in some order. If D = 4, ADDED (which equals 13) would be more than 13. Therefore, D isn't 4; D = 2, and R and A = 1 and 3, in some order. Since ADDED = 13, A + E = 7. Since A = 1 or 3, E is either 6 or 4, respectively. PIPED = 32. If E = 6, P + I + P = 24. There are no combinations of two different digits, however, for P + I + P that equal 24. Therefore, E isn't 6; E = 4. A, then, = 3, R = 1, P = 9, and I = 8. SPIED = 30 and P + I + E + D = 23, so S = 7. Since STATE = 24 and S + A + E = 14, T = 5. Since STEAK = 25, and S + T + E + A = 19, K = 6. In summary: R = 1, D = 2, A = 3, E = 4, T = 5, K = 6, S = 7, I = 8, and P = 9.

FIGURE LOGIC HELPS

By clue 9-Down, 9-Down's first digit is 1. 1-Across's first digit, then, is 3 (clue 1-Across). Since 4-Down's first digit is also 3 (clue 4-Down), by clue 4-Across, 4-Across is 35.

2. By clue 4-Down, 4-Down is 99 and 9-Down is 100.
3. 1-Across's first digit is 1 (clue 1-Across), so 37-Across's first digit is 1 (clue 37-Across), 21-Down's last digit is 9 (clue 21-Down), and 14-Across's first digit is 4 (clue 14-Across). 4-Down's last digit is 5 (clue 4-Down), so 13-Across's first digit is 5 (clue 13-Across) and 14-Across's last digit is 5 (clue 5-Down). 14-Across is 45.
4. By clue 25-Across, 18-Across's first digit is 1, so by clue 18-Across, 22-Down's first digit is 4. By clue 22-Across, then, 22-Across is 45.
5. By clue 27-Across, 7-Down's first digit is less than 3, so by clue 7-Down, 7-Down is 10 or 21. 29-Across, then, is 30 or 63 (clue 29-Across). By clue 1-Across, 29-Across is not 30; 29-Across is 63.
6. By clue 16-Down, 16-Down's first digit is 1, 2, or 3, so by clue 16-Across, 34-Across's last digit is 1, 2, or 3. By clue 34-Across, then, 34-Across is 1121.
7. 28-Down is an even number (clue 28-Down), so its last digit is 2 (clue 30-Across) and 26-Down's last digit is 1 (clue 26-Down). 4-Down's first digit, then, is 1 (clue 4-Down), 13-Across's first digit is 1 (clue 4-Across), and 9-Down's first digit is 3 (clue 13-Across). By clue 9-Down, 9-Down is 333.
8. 5-Down is half of 80-Down (clue 5-Down). Since 80-Down is a two-digit perfect square (clue 80-Down), 5-Down is either 18 or 32. By 5-Across, 5-Down is 32.
9. 5-Down's first digit is at least 2 (clue 5-Down), so 2-Down's first digit is at least 4 (clue 2-Down). 19-Across's first digit is at least 4 (clue 19-Across), but 19-Across's first digit is less than 6 (clue 8-Down); 19-Across's first digit is 4 or 5. 11-Across is even (clue 11-Across), so 12-Down is even (clue 12-Down). 19-Across's first digit, then, is 4 and 11-Across's last digit is 4. 12-Down's first digit is 1 or 2 (clue 3-Across), so, by clue 12-Down, 12-Down is 194 or 204 and 11-Across's first digit is 2. 29-Across's first digit is 2 (clue 21-Down) so 4-Down's first digit is 1 or 2 (clue 4-Down). By clue 3-Across, 12-Down is 204.
10. 13-Down's first digit is 3, 6, or 9 (clue 12-Across) and 13-Down's second digit is 1, 2, or 3 (clue 17-Across). Since 13-Down's digits are the same (clue 13-Down), 13-Down is 33333.
11. Since 12-Across is the 2-digit square root of a 3-digit number (clue 1), its first digit is 1, 2, or 3. Also by clue 1, 5-Down is a perfect square. Since no perfect square has 2 or 3 as its last digit, 5-Down's last digit is 1.
12. By clue 4-Down, 4-Down is even, and its first digit is at least 4. 15-Down's first digit, then, is 8 or 9 (clue 15-Down). By clue 8-Across, 15-Down's first digit is 8, so 4-Down's first digit is 4 (clue 15-Down). By clue 4-Down, 4-Down's last digit is 2 and 10-Across's last digit is 1 or 6. By clue 10-Across, 10-Across is 231.
13. 26-Across is less than 37 (clue 15-Across), so it is 14 or 28 (clue 26-Across). Since no perfect square has a last digit of 8, by clue 14-Down, 26-Across is 14.
14. Since 3-Across's first digit is 1 (clue 17-Down) and 13-Down has two consecutive digits (clue 13-Down), by clue 3-Down, 3-Down is 15 or 18.
15. Since 9-Down's fourth digit is E (clue 15-Across) and 10-Down's fourth digit is R (clue 10-Down), by clue 9-Down, F is not 1. 1 is also not A and R (clue 7-Across), U (clue 11-Across), O (clue 12-Across), H (clue 14-Across), E or T (clue 4-Down); Q is 1.

CROSS SUMS HELPS

#1: 98367	#11: 1932	#21: 1468
#2: 8716	#12: 54789	#22: 896
#3: 912	#13: 2759	#23: 261
#4: 3896	#14: 239	#24: 36
#5: 873	#15: 27968	#25: 689
#6: 31582	#16: 73689	#26: 41632
#7: 2863	#17: 8764	#27: 136295
#8: 912478	#18: 1426	#28: 682314
#9: 1382	#19: 64859	#29: 72953
#10: 427	#20: 26341	#30: 982513

KROSS NUMBER HELPS

#1: 697 #2: 9752167

CROSSMATH HELP

1-Down is 667 ÷ 29.

SUM 'EM UP

	0	1	2	3	4	5	6	7	8	9
1.	L	A	B	Y	R	I	N	T	H	S
2.	L	U	M	B	E	R	J	A	C	K

SENTENCE ARITHMETIC

	0	1	2	3	4	5	6	7	8	9
A.	I	N	E	V	O	R	Y	S	U	T
B.	O	R	F	I	U	E	N	S	T	H
C.	Y	T	M	E	R	W	U	O	S	A
D.	I	D	A	B	R	L	M	T	E	O
E.	M	K	R	E	T	C	O	N	A	U
F.	O	G	H	F	T	N	R	I	P	E

If my car were like my computer, I would have to press the start button to turn the engine off.

WHAT'S THE ORDER

Combinations A and B each contain 1 answer digit, and share only the digit 2. Since the answer consists of four different digits, 2 is not an answer digit. A, then, contains 1 answer digit (4, 3, or 9) and B contains another answer digit (7, 6, or 1). By elimination, the other two answer digits are 5 and 8. By C, 9 and 4 are not in the answer, and by A, 3 is in the answer. By E, 6 isn't in the answer; 7 or 1 is the final digit. If 7 were in the answer, by B, it would be first. 5 wouldn't be second (D) and 8 would be third (C). 5, then, would be fourth, and 3 would be second. This, however, contradicts E, which states that 3 isn't second. Therefore, 7 isn't in the answer; 1 is. By B, 1 is the last digit. 5 is second (D), and 8 is third (C). By elimination, 3 is first. The answer, then, is 3581.

WORD ARITHMETIC

	0	1	2	3	4	5	6	7	8	9
1.	D	I	S	P	A	T	C	H	E	R
2.	S	C	A	R	Y	/	M	O	V	I	E
3.	U	N	S	C	R	A	M	B	L	E
4.	S	A	F	E	T	Y	/	L	O	C	K
5.	J	U	S	T	/	B	E	/	C	A	L	M
6.	C	L	E	A	N	/	S	P	O	R	T
7.	G	R	E	A	T	/	M	U	S	I	C
8.	C	U	S	T	O	M	/	B	I	K	E
9.	M	A	R	C	H	/	W	I	N	D	S
10.	D	R	I	V	E	N	/	B	A	C	K
11.	F	A	I	R	-	S	P	O	K	E	N
12.	E	A	S	Y	/	P	R	O	F	I	T
13.	B	E	D	/	O	F	/	N	A	I	L	S
14.	H	E	/	R	U	N	S	/	W	I	L	D
15.	I	T	'	S	/	A	/	N	E	W	/	M	U	G
16.	B	R	I	G	H	T	/	S	N	O	W
17.	S	I	X	-	Y	E	A	R	-	O	L	D
18.	J	U	G	/	H	A	N	D	L	E	S
19.	C	A	S	T	/	B	R	O	N	Z	E
20.	A	M	U	S	E	D	/	G	I	R	L
21.	B	L	U	S	T	E	R	I	N	G
22.	A	N	/	O	L	D	/	T	R	U	C	K
23.	M	E	N	D	A	C	I	O	U	S

(untruthful)

24.	T	O	U	G	H	/	S	I	N	E	W
25.	R	U	S	H	/	T	O	/	B	A	N	K
26.	C	H	I	V	A	L	R	O	U	S
27.	F	U	N	/	H	O	L	I	D	A	Y
28.	F	A	C	T	O	-	R	E	D	/	I	N
29.	D	O	N	'	T	/	G	I	V	E	/	U	P
30.	I	M	P	O	R	T	A	B	L	E
31.	O	S	T	R	A	C	I	Z	E	D
32.	B	U	C	K	E	T	/	S	H	O	P

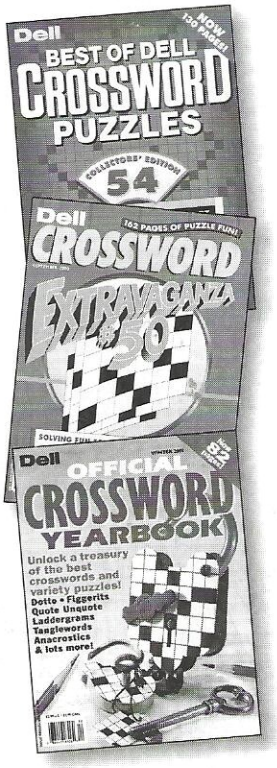
(business using high-pressure sales tactics)

33.	W	H	I	T	E	/	C	O	R	D	S
34.	Y	O	U	R	/	P	I	C	K	L	E
35.	F	E	W	/	A	U	T	H	O	R	S
36.	C	U	R	V	E	D	/	L	I	P	S
37.	H	I	C	K	O	R	Y	/	N	U	T
38.	F	U	R	/	J	A	C	K	E	T	S
39.	Z	E	S	T	F	U	L	/	B	O	Y
40.	L	O	N	G	/	S	E	A	R	C	H
41.	P	I	N	K	/	G	L	O	V	E	S
42.	R	I	T	U	A	L	/	B	O	W	S
43.	P	L	A	Y	W	R	I	G	H	T
44.	A	N	/	O	U	T	S	I	D	E	R
45.	N	A	U	G	H	T	Y	/	K	I	D
46.	F	L	A	V	O	R	I	N	G	S
47.	S	E	C	O	N	D	/	T	A	L	K
48.	T	E	N	/	A	R	M	F	U	L	S
49.	M	A	N	Y	/	T	R	I	B	E	S
50.	G	R	A	Y	/	B	O	W	/	T	I	E
51.	A	/	B	I	T	/	O	F	/	L	U	C	K
52.	C	O	M	P	A	T	I	B	L	E
53.	B	I	G	/	R	O	M	A	N	C	E
54.	A	N	G	R	Y	/	S	H	O	U	T

A Whole Year of Puzzle Fun Delivered Direct to Your Door!

Subscribe today and enjoy the convenience of home delivery.

Crossword & Variety



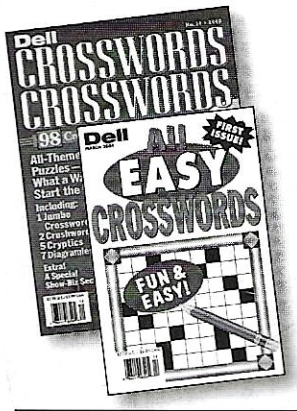
Best of Dell Crossword Puzzles
130 pages of Dell's finest crosswords and variety puzzles including Anacrostics, Figgerits, and many more.

Dell Crossword Extravaganza
74 crosswords *including* five special crosswords and loads of variety puzzles!

Official Crossword Yearbook
35 crosswords and diagramless-es *plus* all your favorite variety puzzles including Cryptograms, Quotation Puzzles, Solicrosses, and lots more.

To subscribe, just fill out the order form below or charge your order by calling TOLL FREE, 1-800-220-7443 (9am-5pm, EST). *Orders only please!*

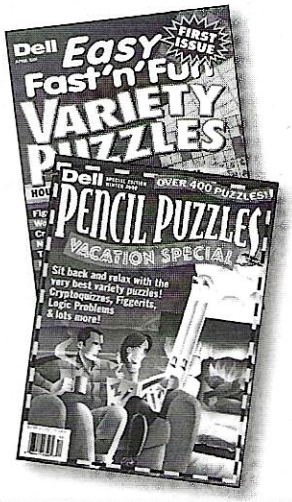
All Crossword



Dell Crosswords Crosswords
98 themed puzzles for hours of challenging fun!

Dell All Easy Crosswords
New! 146 pages of your favorite simple-to-solve crosswords!

Variety



Easy Fast ´n´ Fun Variety Puzzles
New! 130 pages of your favorite easy variety puzzles including Cryptoquizzes, Figgerits, Tanglewords, and lots more!

Dell Pencil Puzzles Vacation Special
194 pages! Anacrostics, Cross Sums, Cryptoquizzes, and more!

Mail to: DELL MAGAZINES DIRECT Suite S, 6 Prowitt St., Norwalk, CT 06855-1220

☑ ***YES!*** Send me the subscriptions to the magazines I've checked below.
My payment of $_____ (U.S. funds) is enclosed.

Title	1 Year
Best of Dell Crossword Puzzles (BOD)	☐ 6 issues - $16.97
Dell All Easy Crosswords (AEX)	☐ 6 issues - $14.97
Dell Crosswords Crosswords (DXX)	☐ 4 issues - $11.96
Dell Crossword Extravaganza (DXE)	☐ 4 issues - $16.97
Dell Pencil Puzzles Vacation Special (PVS)	☐ 4 issues - $17.97
Easy Fast ´n´ Fun Variety Puzzles (EFV)	☐ 6 issues - $21.97
Official Crossword Yearbook (OXY)	☐ 4 issues - $11.96

Send to _____
(Please Print)

Address _____

City/State _____ ZIP _____

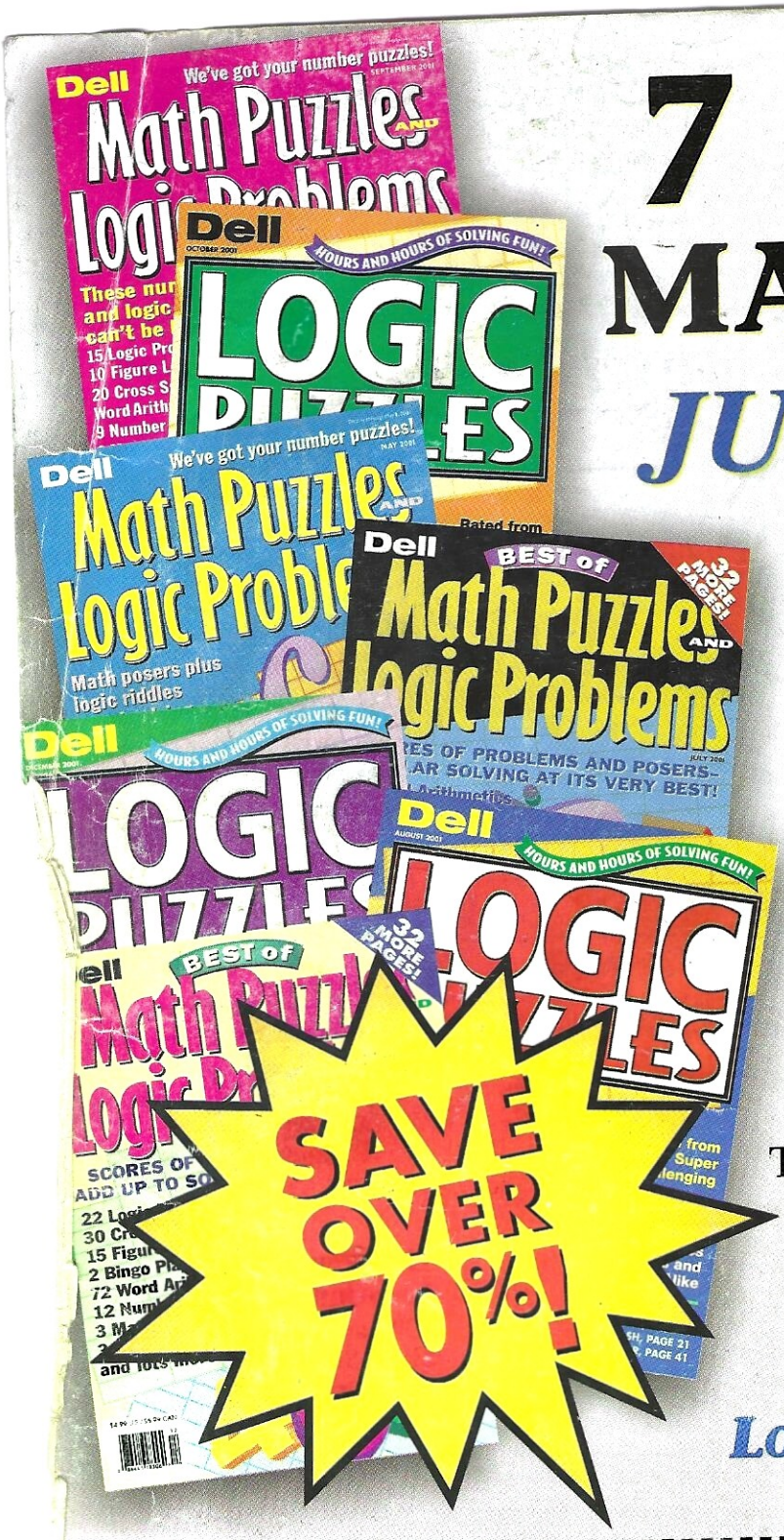
If this is a gift, fill in your name and address below.
For additional gifts, please use a separate sheet of paper.

Name _____
(Please Print)

Address _____

City/State _____ ZIP _____

Allow 8 weeks for delivery of first issue. **Outside USA:** Add an additional $5 postage to your total (U.S. funds). Offer expires 12/31/02. **3012A-CSVXL4**



7 LOGIC MAGAZINES JUST $6.95!

Get a great assortment of seven Dell logic puzzle magazines for only $6.95. ***You save $22.00 off the regular price!***

We'd like you to see firsthand the outstanding quality and value of our puzzle magazines. Try them at this low introductory price and then look for your favorites at your local store.

To get your Dell Logic Puzzles Value Pack, just fill out the money-saving coupon below and mail today!

GREAT PUZZLES AT A LOW INTRODUCTORY PRICE!

YES! Please send me the **Dell Logic Puzzles Value Pack** I've selected below.

☐ **7 MAGAZINES** - just $6.95 plus $3 shipping & handling. My payment of $9.95 is enclosed. ***I save $22.00!*** (LDPK07)

DOUBLE MY FUN!

☐ **14 MAGAZINES** - just $12.95 plus $4 shipping & handling. My payment of $16.95 is enclosed. ***I save $45.00!*** (LDPK14)

MAIL TO: **DELL MAGAZINES DIRECT**
6 Prowitt St, Suite DVP
Norwalk, CT 06855-1220

Name _____
(Please Print)

Address _____

City _____

State _____ ZIP _____

Please make check or money order payable to Dell Magazines Direct. Magazines are back issues shipped together in one package. To keep prices low we cannot make custom orders. Please allow 8 weeks for delivery. Add $5 additional postage for delivery outside the U.S.A. Offer expires 12/31/02.

12A-CLPML3

THE DELL MAGAZINES GUARANTEE

We guarantee 100% satisfaction. If our magazines fail to delight you for any reason, return them to us for a full and immediate refund.